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July, 1987 $2.50

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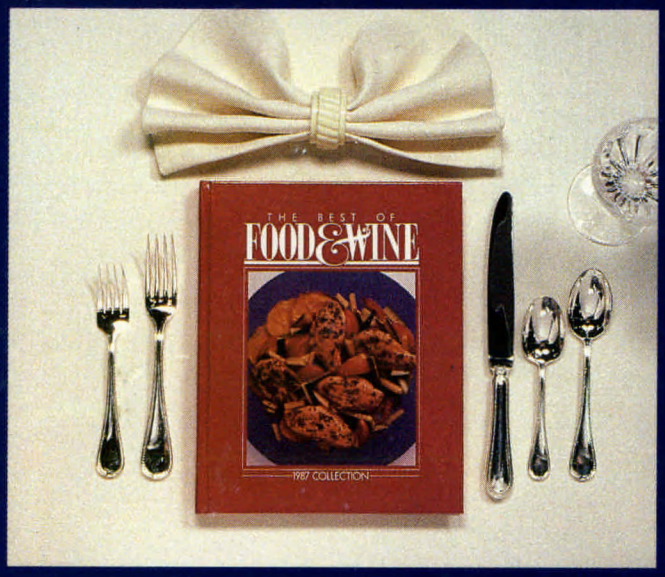

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ELECTRONIC EDITION

Online Today Electronic Edition provides daily-updated computer and information industry news, coverage of CompuServe services, commentary, computer product reviews and more.

GO OLT **A GO-Page Directory** *of the day's top computer industry news and a summary of key OLT page numbers.*

OLT-160 **The Monitor Daily News** *main menu.*

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D E A R R E A D E R

If you've ever spent hours searching for reference articles in the library only to find that the periodicals you need are not available or that your most coveted reference has been torn out of the only copy of a particular magazine, turn to page 12 (we guarantee that page is not missing). This month's cover story, "Sophisticated Search Strategies," will introduce you to a different kind of library — one that combines the best resources in the country with the convenience of 24-hour access from your home.

Once the sole domain of the professional librarian, sophisticated reference systems are now available to anyone with a computer and modem through the CompuServe Information Service. IQuest, for example, one of the largest research systems, serves as a gateway to more than 800 searchable bibliographic and full-text databases, many of which were previously unavailable to the public. Other services, such as PaperChase and the Rare Disease Database, offer in-depth medical information in a searchable format. Microsearch is an online clearinghouse of information about computers and peripherals. EdVENT II is a searchable database of more than 100,000 continuing education classes and professional seminars.

Having access to a vast amount of information, though, could cause as much frustration as not having enough information, unless you know what you're looking for and how to search for it efficiently — and therein lies the story's theme. You'll find out which search strategies work for particular databases and why, and you'll learn what you can do before accessing a searchable database to help save online time.

It's hard to get "lost" in one of these databases, because online help is usually just a few keystrokes away. By typing SOS in IQuest, for example, you can summon a professional researcher to answer your questions online. For more information about the SOS function and the kinds of questions the researchers commonly receive, see page 16.

If the idea of taking a database for a "test drive" appeals to you, you can find out how to do that in "Free Samples" on page 20. Many of the searchable databases offer surcharge-free online tutorials, command summaries and sample searches, so you can get comfortable with using the database before you actually do a search.

Searchable databases can be used for many applications — from tracking competing companies to tackling a term paper. "Find Facts Fast," on page 46, describes databases useful to business people. This month's "Online" column (page 64) provides a detailed tutorial for using Einstein, a reference system of databases for students.

* * *

Whether you're doing online searching or just browsing through the system, you'll be interested to know that the trial reduction of CompuServe Information Service daytime connect rates to standard evening and weekend rates is now permanent.

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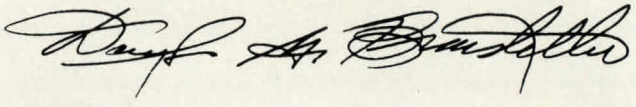

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ONLINE TODAY

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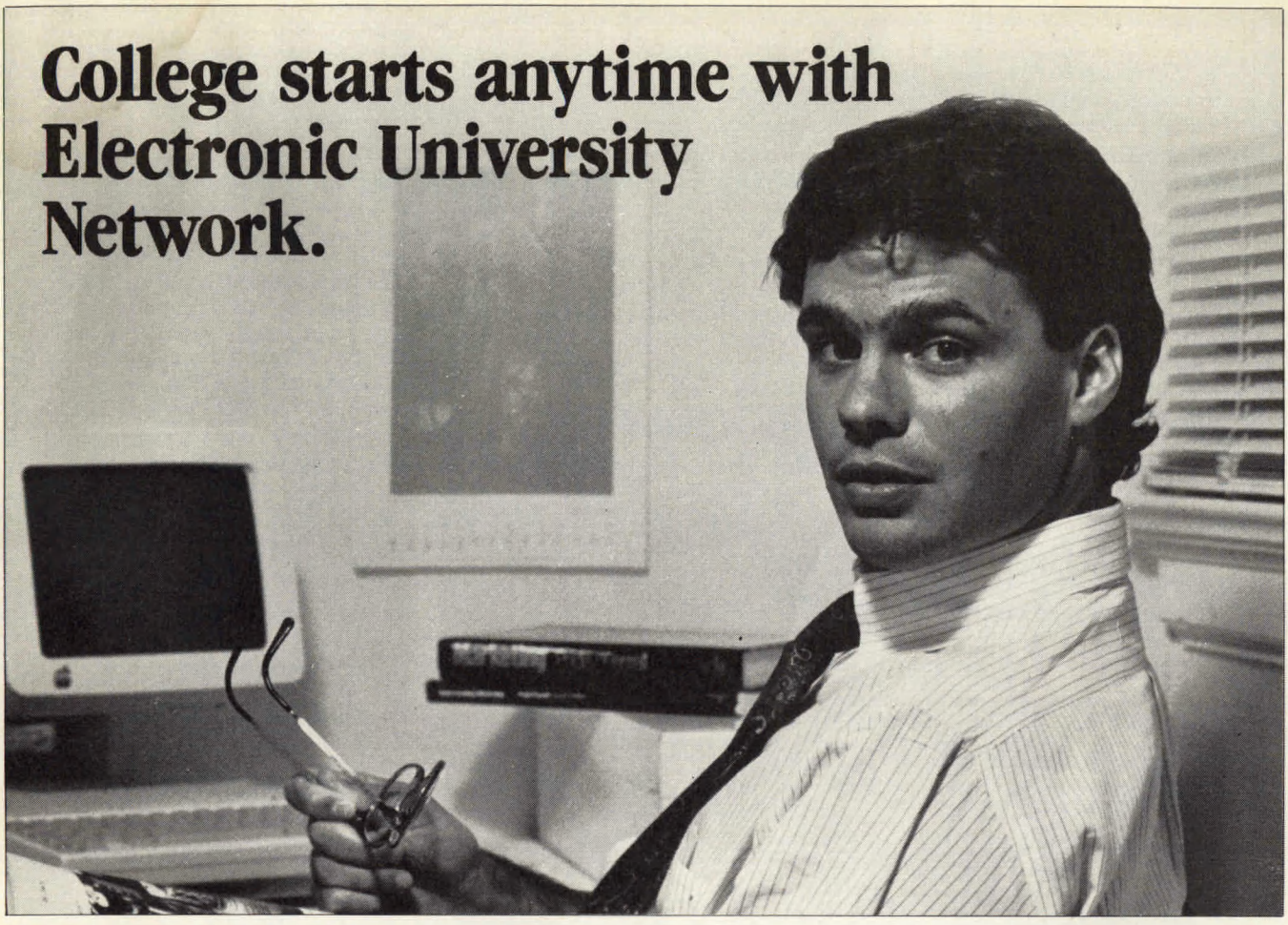

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LETTERS

How CompuServe Works

I have been a CompuServe subscriber for three years and I think it is a useful, enjoyable service. I think subscribers would be interested in reading about how their keystrokes get from the computer keyboard to the central CompuServe system and back.

What type of computer system does CompuServe use? How much online disk space does CompuServe have?

Marty Kovacs
Rowlett, Texas

Editor's Note: Please refer to the December cover story, "A Day in the Life of the Network Nation" (p. 12) and "Information in Motion" (p. 16). These articles may answer some of your questions.

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ECOM Electronic Mail

I just read an article in *Online Today Electronic Edition* describing the revival of ECOM electronic mail by a company called TCOM. There was no mention of an address or phone number for TCOM. I would appreciate information on how to contact this company.

I read your online articles almost daily. I think your staff does a good job and I hope that you will be around for a long time. I would like to see more industry news in "Behind the Screens." Keep up the good work.

Fred Bunn
Atlanta, Ga.

Editor's Note: For more information on TCOM Systems Inc., contact the network administrator, GTE Data Services. GTE Data Services is a "commercial only" service and has offices in all major cities.

Review of Pascal-2

I read your review of Pascal-2 (May *Electronic Edition* Reviews) with interest since I am a current user of Turbo Pascal version 3.01. I am particularly interested in the statements regarding execution speed. There is no mention of which version of Turbo was used in the comparison. The reviewer states that Pascal-2 is seven times faster than Turbo when Pascal-2 is using the 8087. It is not clear whether Turbo-87 was used in this test.

I think the review is too short and I have many questions. Is the development system of Pascal-2 as good as that of Turbo? Would the reviewer recommend writing and debugging in Turbo and then translating to Pascal-2? How would this compare to writing in Turbo and translating to C? What is involved in sending a program to a VAX or Brand X 68000 system? With only a 25 percent increase in speed for more than four times the cost of Turbo Pascal, the port capability seems to be the major use of the product; I would like to have seen more information on that.

John Schindler
Austin, Texas

Reviewer's Response: The version of Turbo Pascal that's installed on my IBM PC is 3.01A. Mentions of Turbo Pascal (not the 8087 version) in the

review weren't meant to be of a comparative nature; I simply needed a common reference point for most readers. The two products are too dissimilar to be considered competitors. I wouldn't think that writing in Turbo and then converting to Pascal-2 would serve any useful purpose. Pascal-2 is a very complete product. Its development, debugging and optimizing capabilities are beyond those of all other PC-based Pascal compilers that I've seen.

That advanced capability also accounts for the price of Pascal-2. When other products are upgraded with developer-supplied add-on enhancements, their total cost approaches that of Pascal-2. Porting Pascal-2 to or from micros and mainframes was beyond the scope of the review. Detailed information on portability as well as a certification report for Pascal-2 can be obtained, at no charge, by contacting Oregon Software at 503/245-2202.

Jim Moran
Online Today

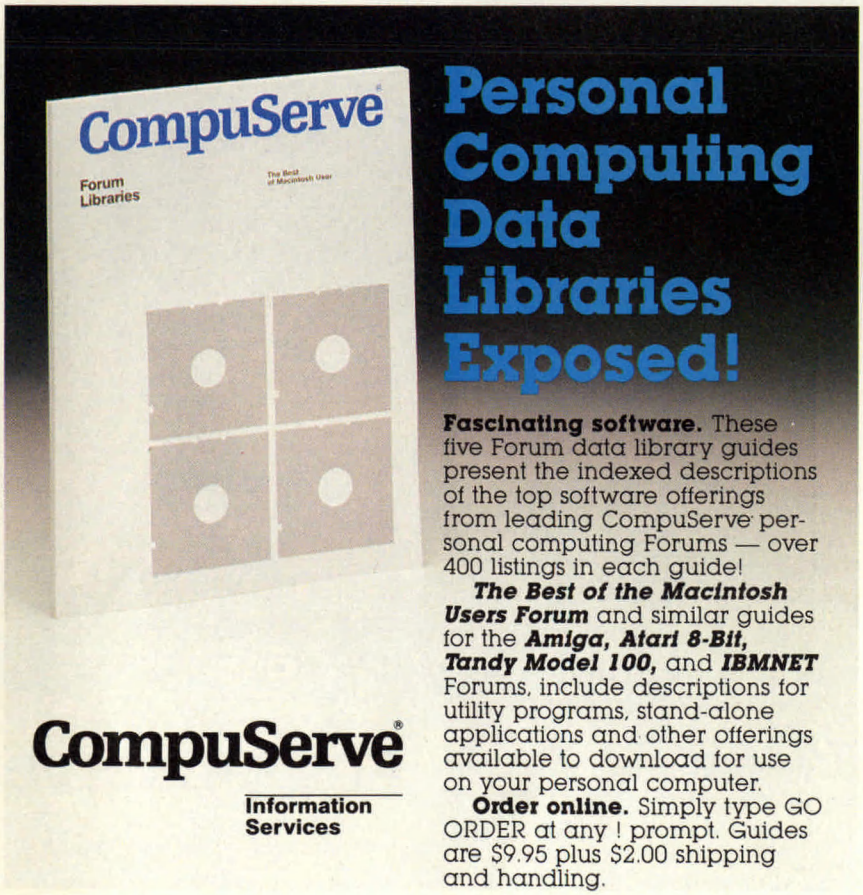
Soviet Cosmonauts

I have a few comments on the article, "Soviet and American Youth Discuss Space" (February issue, p. 17).

The piece ends with some rather overworked cliches. The Russians are not our enemies. The Russian people, much like other nationalities, include conservatives and right-wingers; they don't hate others because of nationality or political persuasion. The Russians do not have a say in the operation of "their" government; in the Soviet Union, they are the government's. The Soviet leaders are driven by the idealogy that anything that promotes Communism is good and anything that doesn't is bad.

I am sure that the 10 Soviet visitors mentioned in the article are fine young people, but we must keep in mind that as the representatives of a Communist government their purpose is to foster that government. The Soviet definition of peace is the lack of opposition to Communism, not the peaceful coexistence of different governments.

Roy Smart
Hopewell Junction, N.Y.



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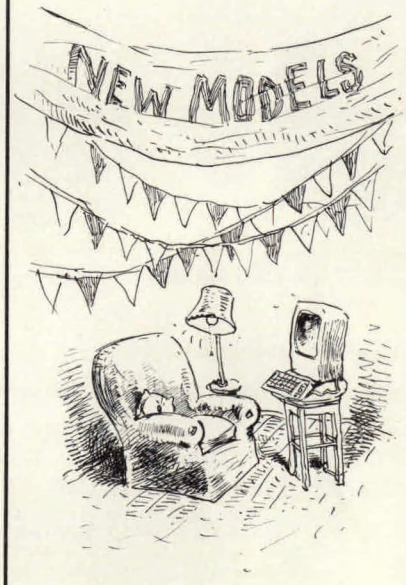

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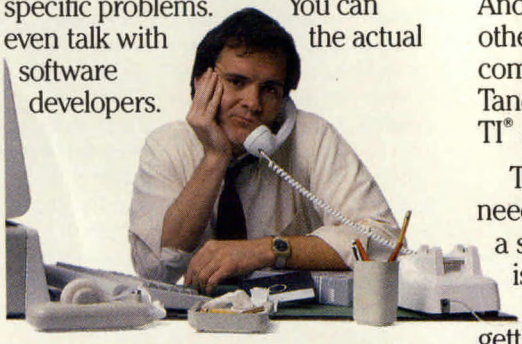

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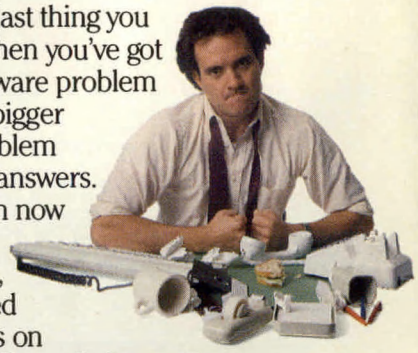

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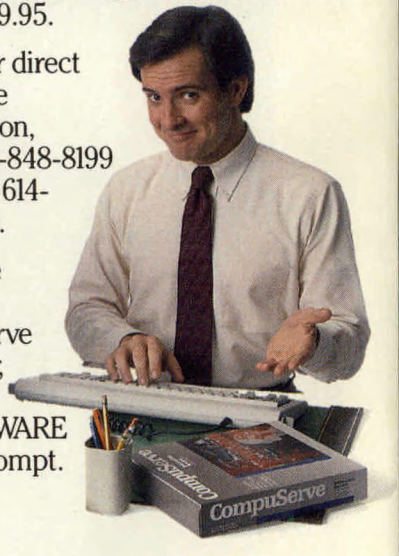

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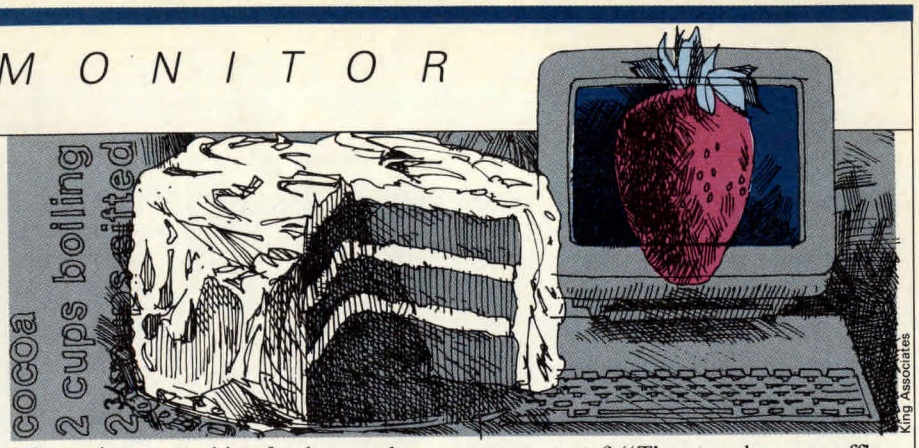
Creative Cuisine Results from AI Technology

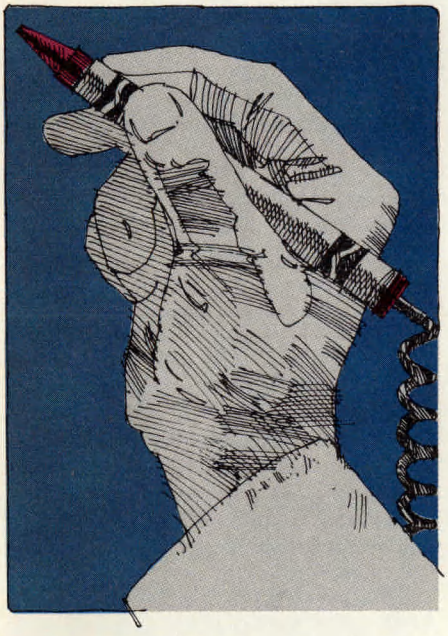
Most computers specialize in eating floppy disks. But in Chicago there is a system that creates cooking recipes—38 savory concoctions ranging from appetizers to desserts.

The CHEF program was written by Kristian Hammond of the University of Chicago. According to Hammond, the software is part of an artificial intelligence experiment that demonstrates how computers can be made to think and reason like humans.

To get the system up and going, Hammond entered a dozen basic recipes into CHEF and then threw in some information on cooking fundamentals (such as how to boil water and what sort of ingredients mix well). Using AI techniques, the program applies its cooking knowledge to the creation of new dishes.



And exactly how do these electronic repasts taste? "The strawberry souffle worked well, but some of the other recipes, particularly the stir-fry dishes, need some work," says Hammond. He notes, however, that CHEF is using its AI abilities to refine its creations. "It is an ongoing process."



'Power User' Defined

Do you consider yourself a power user? Presumably, a power user is someone who needs a powerful computer to keep pace with his or her job.

Still, many of us are not sure if we are power users. And you certainly would not want to commit the *faux pas* of calling yourself a power user when you are not.

Perhaps it will help if we point out the differences between a power user and a non-power user:

A power user will only own a computer with a central processor that has at least five numbers in its designation. A non-power user will only own a computer with a processor that has four numbers in its name (even less in the case of Radio Shack Model 1 users).

A power user frets over which laser printer to buy. A non-power user wonders if a Centronics print-head can be revived by dunking it in 10W-40 motor oil.

A power user owns a plotter. A non-power user owns a crayon.

A power user tests several tax-preparation packages before selecting the best one. A non-power user is exempt from filing.

A power user asks IBM-compatible dealers if their systems will run Symphony, dBase III and Microsoft Word. A non-power user asks if *Flight Simulator* is bundled with the system.

A power user is looking toward CD-ROMs as the storage medium of the future. A non-power user wonders if a CD-ROM drive can interface Beatles CDs to the Music Construction Set.

A power user expects the computer companies he patronizes to provide prompt, helpful customer support services. A non-power user hopes the firms he buys from will be in business next year.

A power user wants the latest PC-AT-type keyboard with 12 function keys, sculptured keytops and a human-engineered configuration. A non-power user would like a keyboard with keytops that move up and down.

Incidentally, there are more non-power users who consider themselves power users than power users who think of themselves as non-power users.

We're glad to have helped you make sense out of a confusing situation.

—John Edwards

Analysts Predict Market 'Hot Spot'

The term "telemanagement" may not sound familiar. In the old days, we used to call the field "telecommunications management." In any case, telemanagement is becoming one of the hot spots of the computer business.

Telemanagement systems and software markets have more than tripled since 1982, according to a report recently issued by the Market Intelligence Research Co., of Palo Alto, Calif. And the boom shows no signs of slowing down.

For instance, the study predicts that telemanagement software and systems sales should reach $182.7 million by 1987 and could possibly go as high as $1.4 billion by 1992. The 1982-1992 compounded annual growth rate for the telemanagement market should be well over 45 percent, notes MIRC.

The report foresees most of this growth coming from microcomputer software sales. Revenues from service bureau operations have peaked, notes the study, and will continue to decline through 1992. Overall, the market will migrate toward a microcomputer-installed base and integrated micro products will eventually play a major role in the industry, claims MIRC. The firm based its report on telephone interviews with industry participants and a study of all available secondary sources.

The study, titled "Telemanagement Software and Systems Markets," is priced at $995. For more information, contact Market Intelligence Research Co. at 4000 Middlefield Rd., Palo Alto, CA 94303; 415/856-8200.

Computerized Cars May Drive to Work

You can pretty much categorize people into two groups: those who love to drive and those who don't. Readers who identify with the latter group will appreciate the following news: computers may soon eliminate the need to have a driver in a car.

Jerry Rivard, vice president and group executive of the Bendix Electronics Group of Allied Signal Corp. in Southfield, Mich., figures that by the year 2010 cars may be able to travel at speeds of up to 130 miles per hour with only a computer "at the wheel."

Speaking before a Chicago meeting of the American Association for the Advancement of Science, Rivard said that such a car will allow freeways to accommodate up to four times the amount of traffic they currently handle. Better yet, it will allow passengers to nap, play cards and do heaven knows what else while speeding toward their destinations.

"It will be no different than the subway system in Paris," said Rivard. "We'll be able to [enter instructions] and go to Florida overnight." According to Rivard, the autos will follow wires embedded in the road and use radar to keep a safe distance away from other cars and objects.

Sounds futuristic—the sort of stuff car manufacturers like to feed to us at World's Fairs and auto shows. But, fortunately, not all automotive engineers agree with Rivard's prediction.

Speaking at the same meeting, Mounir Kamal, a technical director at the General Motors Research Laboratories in Warren, Mich., noted that a driverless auto may prove to be financially unfeasible. "There are a lot of unknowns," he said. "The technology does not allow us to do these kinds of things economically."

Kamal did predict that, one way or another, computers will continue to profoundly influence automobile design. For instance, he noted that within three years we may see intelligent shock absorbers that can sense rough pavement and instantly compensate for it. Kamal also claimed that computer-controlled systems eventually will provide improved traction on icy roads by cutting power to a spinning wheel until it regains traction.

All of which is pretty good news to those of us who still love to drive.

—John Edwards

On top of the computer world: *Gglitches*

Gglitches Find Niches

Oh no! My computer has a glitch—er, I mean a Gglitch! But no need for alarm. The Gglitches won't hurt the computer; they are dolls whose sole purpose is to sit atop a computer monitor. (Don't laugh—remember pet rocks?)

There are six Gglitches: Millie Modem, the telecommunications supervisor, assists with the most sophisticated networks. M. Chip Cobol, the hardware development director, built his first computer at age 10 and earned a Ph.D. from the Massachusetts Institute of Technology at 14.

Merlin Megabyte is a certified computer wizard who solves those weighty problems afflicting larger computers. Computer repair specialist Bill Basic has a special "feel" for fixing computers, but enjoys his afternoon nap. Katie Keystroke is the word processing manager whose only fault is her ticklish feet. Frank Format, the software design consultant, is a charmer who can de-bug anything.

If you look closely this fall, you'll see Gglitches on the computers on the sets of such television shows as "Dallas," (check out J.R.'s secretary's computer in the offices of Ewing Oil), "Head of the Class" ("Fred" and "Wilma" are bedecked), "Webster" and "Hunter."

The 12-inch-high dolls are constructed of polyethylene pellets and are poseable. They're even dressed for success in hand-sewn clothes.

Manufactured and distributed by Creative Products Manufacturing Inc., the Gglitches sell for $19.95 each and are available at gift, toy and department stores nationwide.

For information, contact Creative Products Manufacturing, 946 Seneca St., Bethlehem, PA 18015; 215/866-2001.

Corporate Computing Salaries on the Rise

For those who want to turn their computer hobbies into careers, Source EDP, a California-based recruitment firm, has some good news.

Entry level salaries for non-management positions, such as programmers, software engineers and analysts, ranged from $21,700 to $27,200, according to Source EDP surveys. These salaries can increase to $42,000 or more with five years experience.

Starting salaries for programming managers, data center operations managers, computer systems directors and the like range from $28,000 to $42,000. If applicants have some experience, those figures can shoot as high as $66,000 to $80,000. Starting salaries for sales representatives average $23,000 and rise to about $40,000 with experience.

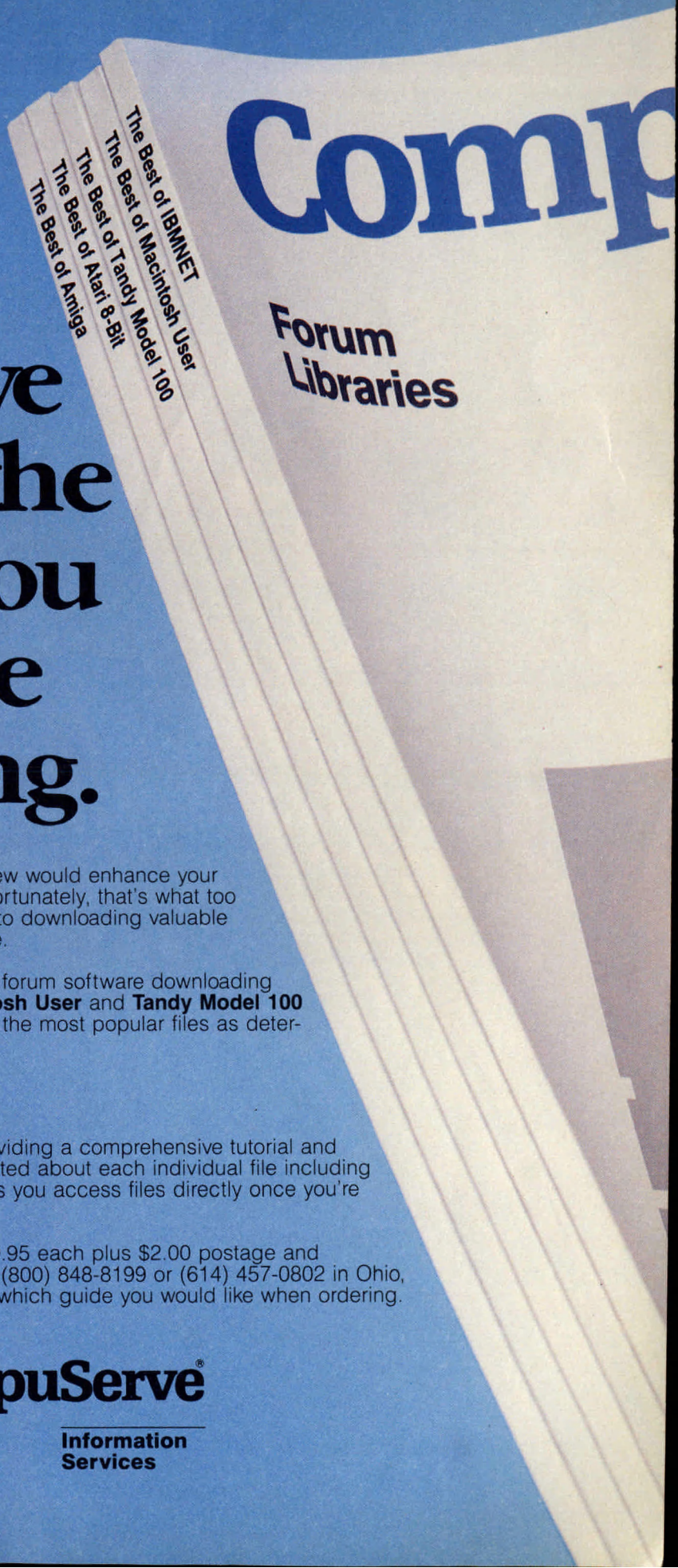
Trends in technology and computer careers are diverse. For instance, the use of microcomputers within businesses has vastly expanded in just a few years. In 1975 there was virtually no market for micros in business, but industry analysts predict that sales of micros for offices will top $300 billion by 1995. Career opportunities emerging because of this are in software development, programming, marketing and marketing support for vendors of mini- and microcomputers.

Another trend, according to Source EDP, is for the computer professional to become more specialized. As corporate computing needs become more sophisticated, many firms need specialists in such areas as systems programming, security analysis, quality assurance and hardware/software analysis. Industrial automation—making robots that make things—is another growing area.

In spite of the promising numbers, there are more computer professionals in the job market, allowing companies to be more selective.

Source EDP offers a free booklet to computer professionals looking for career development opportunities. To obtain a copy, contact Source EDP, P.O. Box 7100, Dept. PD302, Mountain View, CA 94039; 415/949-2688.

—Cathryn Conroy



CompuServe offers you the guidance you need for file downloading.

Would you completely ignore something that you knew would enhance your personal computer's capabilities? Probably not. Unfortunately, that's what too many personal computer owners do when it comes to downloading valuable program files from the data libraries on CompuServe.

To remedy this problem CompuServe has published forum software downloading guides for the **Amiga, Atari 8-Bit, IBMNET, Macintosh User** and **Tandy Model 100 Forums**. These *Best of ...* guides are a collection of the most popular files as determined by the members of each of these five forums.

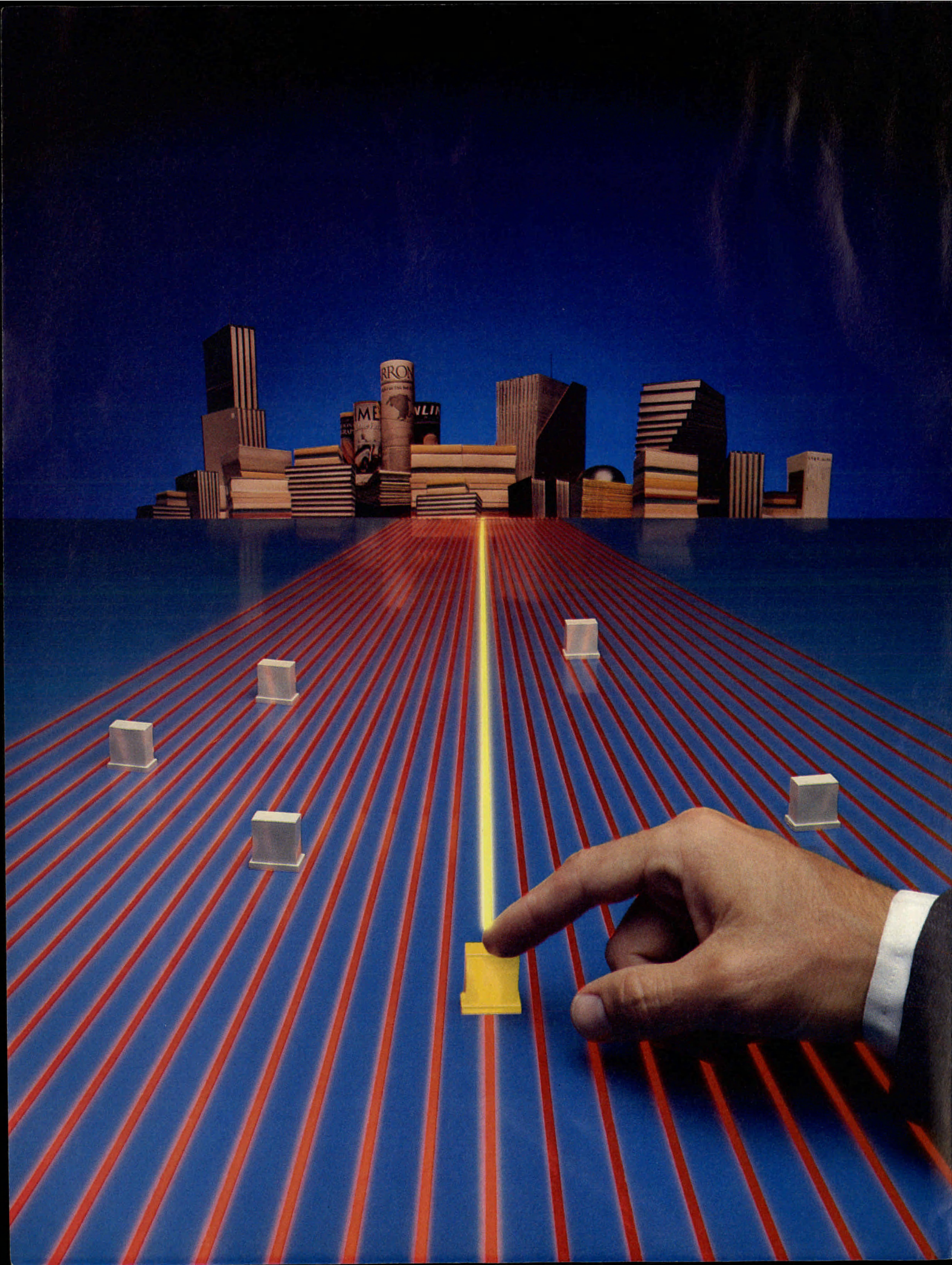
File retrieval made more efficient.

The guides make downloading more efficient by providing a comprehensive tutorial and a keyword index. Also, specific information is presented about each individual file including name, size, description and location. All of this helps you access files directly once you're in the forum, reducing online search costs.

Order online by entering GO ORDER. Guides are $9.95 each plus $2.00 postage and handling. If you're not a subscriber, order by calling (800) 848-8199 or (614) 457-0802 in Ohio, Alaska or outside the United States. Please specify which guide you would like when ordering.

CompuServe®

Information Services



SEARCH STRATEGIES

Seeking and Finding Information Online

By Cathryn Conroy

There was a time, not long ago, when a sophisticated research strategy involved traveling downtown to the main library; consulting with the reference librarian; and spending hours poring over the card catalog, the *Reader's Guide* and finally the dusty stacks of books and magazines.

Well, sweep the dust away and power up the computer: "sophisticated" has taken on new meaning with the advent of searchable computer databases that are affordable and easily accessible using a personal computer and CompuServe.

A new kind of power

The searchable databases available on CompuServe, such as IQuest, PaperChase, the Rare Disease Database, Microsearch and EdVENT II, provide a unique power.

This power is not political, military or economic, but something more basic: the power of information, according to Alfred Glossbrenner, author of books on telecommunications, including *How to Look It Up Online* (St. Martin's) and *Alfred Glossbrenner's Master Guide to CompuServe* (Simon and Schuster/Brady Books).

All individuals—be they butchers, bakers or corporate deal-makers—can accomplish more better, faster and cheaper, with the right information. "Until now, the problem has always been getting the needed information when it is required," says Glossbrenner. "Now that problem is a relic of the past." Without the online databases, he believes, this kind of information would not exist for the average person.

"Just having the information in print will often not do you any good. You need to be able to search it. For instance, real power is being able to say, 'Show me every company that has a net worth of *x* amount of dollars.' That power has never existed before and exists today because of the communicating personal computer and CompuServe," says Glossbrenner.

Rules for Searching

1. *Respect your opponent — The information database*
2. *Define your target*
3. *Consider the source*
4. *Don't go online until you're ready*
5. *Know your databases*

But getting that power doesn't come easily. To find every reference to diabetes in PaperChase or to find information on business travel in Asia in the IQuest databases requires more than a computer and modem. "Searching a database is an art and a skill," says Glossbrenner, "just as is learning to use a computer or applications program. You cannot just plunge into it and say, 'Give me everything you have on the steel industry.' We're not there yet and may never be. Computers are too literal for that kind of command. You'll be inundated with information because the computer doesn't understand what you really want."

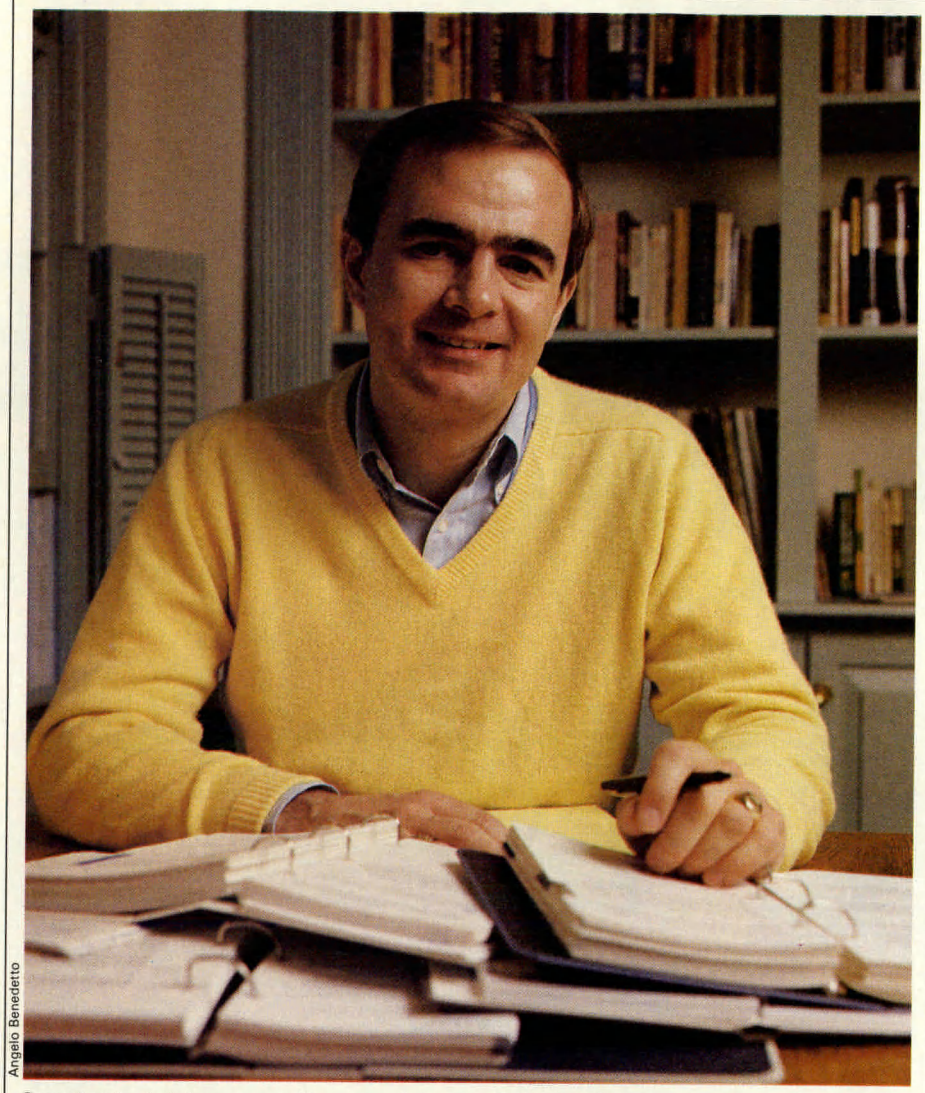
Determining what you really want to know about the steel industry is the art and skill of database searching. Once the sole domain of the professional librarian, sophisticated searches are now available to just about anyone. But to make those searches truly valuable—and powerful—users have to fine-tune their search skills.

The rules of searching

After years of practicing sophisticated searching, Glossbrenner has developed five rules for search success:

- Respect your opponent—the information database
- Define your target
- Consider the source
- Don't go online until you're ready
- Know your databases

With tongue in cheek, Glossbrenner calls the databases the "information monsters." He says, "You have to change mentally and realize how much information you have access to. It is a mistake for anyone to assume there is any way to instantly comprehend the enormous amount of information available online. You have to ease into it and learn to paddle around in the information stream first before stepping out into the deep water, for it is very



Angelo Benedetto

Searchable databases provide powerful potential: *Glossbrenner*

deep and very fast."

One look at the listing of the more than 800 databases available in IQuest alone is enough to make even the adventurous feel timid. But defining the research target properly will get most users on track. That is easier said than done.

If you are interested in researching a particular aspect of the personal computer industry, for instance, typing PERSONAL COMPUTER INDUSTRY will get you thousands of potential leads. Instead—and here comes the art of database searching—you need to narrow those keywords to fit *exactly* the topic you have in mind.

Semiconductors, you say? What about semiconductors? Maybe you are interested in the future of semiconductors, such as the 64-bit chip. OK, but what is the point of your search, the question you want to answer? If you want to know "the effect the 64-bit chip will have on the personal computer industry," you need to translate that into keywords the database can understand, such as MICROCHIP AND 64 AND BIT AND FUTURE.

"There is a point where you don't want to be too specific because you won't get any hits at all," Glossbrenner warns, "or you will find some things but not everything that would have been of interest."

Searching the medical databases, such as PaperChase and the Rare Disease Database, can be trickier because the keywords are more technical and less commonly used. "Some of the keywords are long and difficult to spell," says Craig Knouf, CompuServe product manager. "It is best to use a single word reference with as few characters as possible." For instance, use HEART instead of HEART ATTACK.

The problem here is that the category may be too broad. Perhaps the area of interest is heart arrhythmia. Instead of using both of these as keywords, Knouf suggests using HEART ARRHYT.

In the Rare Disease Database some misspellings of keywords also are provided because so many users routinely misspell them, according to Knouf. He suggests that before going online, you check with your doctor as to appropriate keywords to use, take notes and check spellings in a medical dictionary.

Selecting keywords is an art, but when you pay attention to this process before going online you'll find that your search produces more information at a lower cost.

Keywords separated by AND or OR are called Boolean combinations. This is the key to successful search strategies. Seth Horwitz, a member of the IQuest SOS team (see accompanying story), offers these tips for developing the best combination of keywords:

"Connect concepts with AND and synonyms with OR and enclose the keywords in parentheses. Connect an excluded concept with NOT," he explains. For example, (CompuServe or Source or Delphi) AND (electronic mail or email or e-mail or electronic messag/) AND marketing NOT personnel.

To make this process easier, Horwitz has developed a diagram. The keywords listed above are filled in where appropriate, but such a diagram could be used for any search to guide you in this process of definition of terms. Once the keywords are selected, you need to determine the best place to look for information. The five main searchable services on CompuServe are a good

EXCLUDED CONCEPT	MAIN CONCEPT	SECOND CONCEPT	THIRD CONCEPT
Personnel	CompuServe	Electronic Mail	Marketing
SYNONYM ONE	Source	email	
SYNONYM TWO	Delphi	e-mail	
SYNONYM THREE		electronic messag/	

place to start.

IQuest is a gateway to more than 800 independent databases ranging from book reviews to investment information. PaperChase is a more user-friendly version of Medline, the electronic version of *Index Medicus*, while the Rare Disease Database is a unique source of information not available anywhere else, electronically or in print. Microsearch offers hardware and software literature and reviews from hundreds of publications, and EdVENT II is a searchable database of upcoming continuing education courses and seminars.

Not every question or research topic is best answered through an online search. Recognizing when to go online and when to make a telephone call or a trip to the local library is all part of becoming a sophisticated searcher.

Still, there are some things that are available only online. For instance, statistical, financial and, in many cases, medical information is best researched electronically because of the currency of the information.

"The bottom line," says Glossbrenner, "is to view the online tool as one of several available research tools for information retrieval."

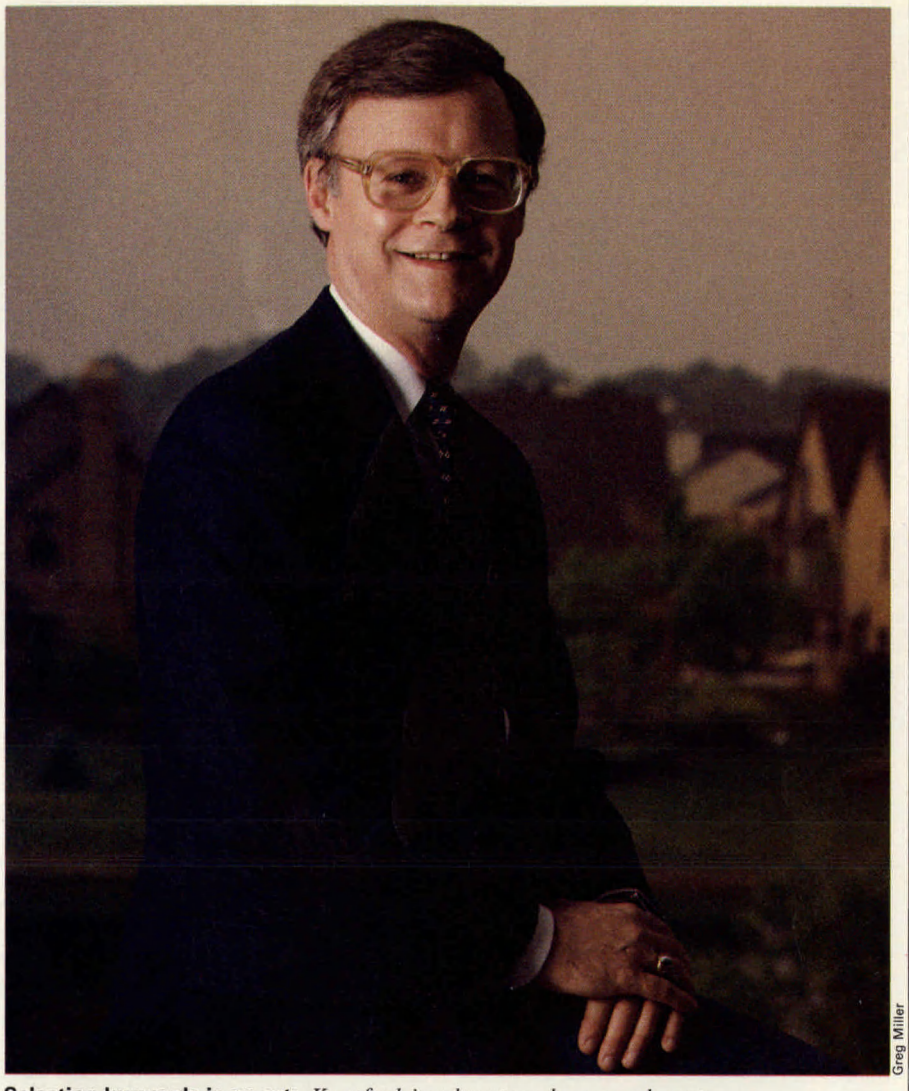
Finally, you should become familiar with the databases so you know the best place to search for information. Just as selecting the proper keywords is an art, choosing the right database is a skill that is fine-tuned with use.

IQuest, for instance, makes this task easier by allowing two kinds of searches: you pick the database if you know exactly what you want, or let IQuest select the database, which is probably more effective for novice users.

"Everyone on CompuServe should try using IQuest at least once. It is fun and interesting to sample the information powerhouses. But don't wait until the day before your kid's term paper is due. Try it out just for fun. Key in on a topic and see what happens. IQuest is the easiest, cheapest way for the average CompuServe user to get a first-class introduction to the information age," says Glossbrenner.

There are two main ways of conducting research: electronically through online databases or manually through the library. There are fees associated with electronic research, but often you will find this cost to be minimal, especially when your own time savings are counted in.

"IQuest charges $7 for 10 bibliographic listings," says Glossbrenner.



Greg Miller

Selecting keywords is an art: *Knouf advises how to reduce search costs*

"If you didn't want to pay that, think about how long it would take to go to the library—assuming there is a nearby library that has access to this kind of collection, and few libraries can approach that—and then spend the day scanning the shelves. It is a chore to go through the *Reader's Guide* and scrawl out references. Consider the electronic alternative; I say it is still cheaper to do it online."

Most of the searchable databases on CompuServe carry surcharges above the regular connect-time charges, but effective offline preparation and planning for your search will significantly decrease the amount of time and money you must spend.

Not everything can be measured in dollars and cents. Remember, many of these online databases offer unique information that is not available anywhere else or is not available in one location. That kind of convenience and timeliness can be priceless.

After you have mastered the basics—defining the keywords and selecting the database—it is time to move on to the specifics: how to manipulate the individual CompuServe databases.

IQuest

In many ways, IQuest is CompuServe's most sophisticated service, serving as a gateway to more than 800 searchable databases, many of which were previously unavailable to the general public. Still, the system is fairly simple to use with an easy-to-follow menu that will guide you through the search process.

Unlike many of CompuServe's products, IQuest is not designed for some-

one who just wants to browse. It is best used for a specific research project or to answer a specific question.

For instance, Michael Cartel wanted to find more information on his great-grandfather, George Foster, who opened one of the first newspapers in Guthrie, Okla., during the famous land rush of 1889. His search was complicated not only by the fact that he wanted rather obscure information, but also because a likely source—the Los Angeles Public Library—had caught on fire. IQuest came to his rescue and offered just what he needed to know about his frontier journalist ancestor.

To access IQuest, type GO IQUEST. CompuServe serves as a gateway and you'll actually be accessing such services as Dialog, BRS, NewsNet and Vu/Text among others. IQuest has a surcharge based not on the connect time but on the number of searches you perform. IQuest will frequently display the charges as they accrue, so there are no surprises.

The first-time IQuest user would be smart to download and print the first four menu items on the introductory menu. (There is no surcharge for this.) These include a general introduction to IQuest, search tips, pricing and a directory of databases available. The time spent doing this—as well as studying the information offline—will save you money in the long run. A free brochure with some basic search tips and a complete listing of all IQuest databases can be ordered online.

IQuest offers two types of databases: bibliographic and full text. Bibliographic databases provide complete reference information on an article, including title, author, publisher and date. Many databases even provide an abstract or summary of the article.

Full-text databases provide the entire text of the article, although these databases are necessarily narrower in scope than those offering only bibliographic citations.

The basic cost for a search is $7. A few of the databases have a $4 to $25 surcharge per search, but these are indicated clearly online prior to performing a search. If you are using a bibliographic database, you will receive up to 10 citations. Each abstract is an additional $2. If you are using a full-text database, you will be shown up to 15 article titles and the full text of one.

Once you have entered the IQuest area, there are two ways of searching. The first, called IQuest-I, guides you through a series of menus that defines your topic of interest. IQuest then determines which database is right for your search. The menus begin with general categories, such as subject, person and place, and then become more specific as you narrow your search.

If you know the database you want to access, select IQuest-II. You will be prompted for the name of the database and will then receive a prompt to enter your keywords or the option to select between "Basic Searching" and "Field Searching." Entering keywords or choosing basic searching will ask you to enter a subtopic (now you can benefit from the time you spent offline developing your keywords). After you type in the subtopic, IQuest takes over and conducts the search.

Field searching is another way to explore a database. When you select this option, you will receive another menu asking how you want to direct your search. This varies for different databases, but offers you a way to pinpoint a specific aspect of the topic.

For instance, if you were to use basic searching in WilsonLine's *Book Review Digest* you might want to search all books on anorexia. If you selected field searching, you could search by title or author only.

When your search is completed, IQuest will display the total search charges you have accrued during that

How SOS Works

Remember when you were a kid and had to go to the library reference room to research a term paper? When you became confused, lost or just overwhelmed, you asked the reference librarian for help.

That same personal, one-on-one service that can make a mind-boggling mess into something comprehensible also is available online in IQuest, a gateway to more than 800 online databases.

Even though the IQuest menu system is simple and does a good job of guiding you through the search process, there are times when you can be overwhelmed. Perhaps your keywords are not exactly right — you may be getting too many matches or too few — or perhaps you have not selected the best database. No matter what the problem, you can receive help simply by typing SOS.

Headquartered in Bryn Mawr, Pa., the IQuest SOS service is available 24 hours a day, 365 days a year and carries no extra surcharge beyond the usual CompuServe connect-time rates. After you type SOS, an audible signal alerts a staff of eight full-time and four part-time professional librarians and IQuest experts.

Seconds later, you'll see a message flash across your screen that will read something like, "Hello, this is Kate. How can I help you?" You type in your question and the librarian may ask another question to help define the problem. For example, you may ask for information on trees, but what you really want is a leaf identification guide. This query negotiation process — held in real-time, much as in a CompuServe forum conference — is designed to determine exactly what you need.

Once the problem is understood, the librarian will offer expert advice on database selection, search string formulation or both, based on personal knowledge and training and the extensive print resources and documentation from every IQuest database vendor. Sometimes the librarian will direct you to another source on CompuServe or even to your local public library.

If your question is complicated or if the SOS system is busy — more than 100 SOS requests are received each day — the librarian will ask for your telephone number and call you back with the answer, rather than keep you waiting online.

The system automatically tells the SOS librarian your last search string and the number of hits. Your name and CompuServe User ID number are not displayed, so your privacy is protected at all times.

"Our only intention is to diagnose the problem," says Seth Horwitz, one of the SOS electronic librarians. "By seeing information on the last search string we are sometimes able to identify a typo, a logical error or a truncation error. But as often as not, the question has nothing to do with the last search." He adds that some users go straight to SOS before attempting a search.

—CDC

session. This does not include the regular CompuServe connect fees or any applicable communications surcharges.

If all of this still seems overwhelming, it is easy to get instant help. By typing SOS, you can get online assistance from an IQuest expert. The exchange occurs in real-time, much like a forum conference, and there are no extra charges for the service. (See accompanying story for more information on SOS.)

PaperChase

When Susan Katz doubled over with pain last December, her only thought was getting to the hospital—fast. The pain turned out to be caused by an ovarian pregnancy that occurred with a Copper-7 IUD in place. She barraged her doctor with questions concerning this rare complication (none of the four doctors who treated her had ever seen it in their combined 50 years of medical practice), but was not satisfied.

After her release from the hospital, she accessed PaperChase to find out all the facts she could. It wasn't long before Katz discovered that there were only 50 other cases nationwide. She secured citations for eight articles that dealt with the case histories of women who had similar medical situations.

Once the domain of physicians and medical librarians, detailed professional medical information is now available to the consumer through PaperChase (GO PCH). Developed by Boston's Beth Israel Hospital, PaperChase is essentially a user-friendly version of the complicated Medline database, which is an electronic version of *Index Medicus* operated by the National Library of Medicine. The PaperChase system is so much easier to use than Medline that some experts give Beth Israel credit for rewriting the book on searchable databases.

PaperChase offers all material indexed and abstracted for Medline dating back to 1966, including more than 5 million references from some 3,400 journals. Each month, an additional 25,000 references are indexed and abstracted.

Searches can be conducted by title words, medical subject headings and subheadings, author's name, journal title, year of publication, language of publication and Boolean combinations of any of these. A series of simple questions helps the user in the search, and online help is available. Abstracts can be displayed and printed, although their contents cannot be searched.

There is a $24 per hour surcharge with an average charge for each search of $7 to $8. This is one of the lowest rates of all online services currently offering access to Medline.

The full text of documents cannot be retrieved online, but it may be ordered electronically from PaperChase for a charge of $6. Most are sent out the next business day.

Like IQuest, detailed instructions on the use of PaperChase are available online in the introductory menu.

IQuest's SOS Answers Uncommon Questions

IQuest's SOS service receives more than 100 queries each day from users who need help in conducting online searches. The following is a sample of the types of questions they receive and the answers the professional electronic librarians give.

Query: I'm trying to find information on the myth that too much education makes women insane. My search query is INSAN? or MAD? (WOMEN and EDUCATION).

SOS: That must be a classic! I think your search query is good, but you need an "and" in there. Try asking it this way: (INSAN/ or MAD/ or CRAZ/) and (WOMEN or FEMALE/) and EDUCAT/. I suggest you try the Historical Abstracts database, and if that is not successful, try Psych Abstracts.

Query: I want to find a citation for a specific article titled "EEG Monitors" printed in 1986 (15: 71-95) in *Health Devices*.

SOS: Go to the Medline database and select the expert mode from the menu. Next, select the correct date file and choose to search by subject. After that choose by title and type "EEG Monitors." Then you can search for more fields and select to search by journal. Finally, choose to search by journal name and type HEALTH DEVICES. Then let the system do the searching.

Query: I'm looking for information on grants given to podiatrists or other physicians for research related to the human foot. I'm having difficulty defining appropriate keywords.

SOS: I suggest leaving out references to "feet" and concentrate on the podiatric/medical aspects. Use the keyword PODIATR/. (The slash represents a wildcard ending.) If that doesn't work, try DOCTO/ or PHYSICIAN/.

Query: I'm looking for statistical information on the housewares and gift industry in the United States. I tried PTS PROMT without any luck. Any suggestions?

SOS: I'm looking for other databases, but PTS PROMT is probably best. Try using the product code for gift shops, which is 5947. It might not be exactly what you're looking for, but that's as close as the product codes come to gifts and housewares.

Query: I need a list of presidential candidates and a biography of each. Where would I look for this?

SOS: That is an interesting question, since we have candidates popping out of the woodwork, as well as non-declared candidates to deal with. I think your best bet is *The Washington Post*, since it is politically oriented, is full text and is updated daily. For a search term, use PRESIDENT/ and CANDIDA/.

Query: I'm trying to get financial information on a private company called Medco Temporary Health.

SOS: I suggest you look in Dun's Market Identifiers or Trinet Establishment Database. If nothing comes up in those, you might try a news file that covers some of the smaller, regional business papers such as Business Dateline.

Query: I'm having trouble finding information on the names and addresses of independent insurance agents in Ohio with premium volumes of between $1 million and $2 million.

SOS: I suggest you try Dun's Million Dollar Directory and then use INSURANCE and AGEN/. Then give (AGEN/ or AGENCIES) a try. Be sure to choose to search by name of state and look at the codes for information on how to use that. It is probably OH, but check it to be sure.

—CDC

Again, downloading and printing this information is invaluable to the novice user.

If you run into problems, you can get person-to-person help by calling 800/722-2075.

Rare Disease Database

Unlike the other searchable databases on CompuServe, the Rare Disease Database contains information that is not available in any other form, including print. Because of the nature of this database, medical experts and patients regularly turn to it for life-saving, crucial information.

Since rare diseases are just that—rare—the Rare Disease Database is something that the average CompuServe user may not need often. But when you do, you'll be thankful. Last Thanksgiving, I discovered its power firsthand. My 15-month-old son, who had not been gaining weight at an acceptable rate, was diagnosed by his pediatrician as suffering from malabsorption. The doctor wanted to test him for cystic fibrosis. My husband and I believed that CF was not his problem. But what was it?

Using the keyword MALABSORPTION we searched the Rare Disease Database and within seconds received a listing of nine rare disorders. Seven of these didn't apply to our son, but the other two held possibilities: cystic fibrosis and lactose intolerance. We downloaded all the information on both diseases, and concluded that he suffered from lactose intolerance.

The doctor was receptive to our research and diagnosis, and took him off milk products. After several weeks, our son had a substantial weight gain, and the pediatrician agreed with our diagnosis.

The Rare Disease Database (GO RDB) is sponsored by the National Association for Rare Disorders Inc. and offers a complete listing of rare disorders that are searchable by symptom, disease name or CMIT number. A search may be narrowed or expanded using multiple keywords, and menus guide you through the search. For those who cannot understand the medical language of an article, researchers at NORD will "translate" it into simpler terms.

The introductory menu offers search tips through an index of diseases, and guidance on using keywords effectively. Once you have begun a search, the system will tell you how many diseases were found and allow you to narrow it, expand it or display the information retrieved. Rather than just offering the user the full text of an article, the Rare Disease Database breaks it down into sections, such as synonyms, general information, symptomatology, etiology, therapies, resources and references, so you can choose only those sections you need, saving online time and money.

Microsearch

Buying a computer system or software program is often a major purchase. In addition to the high cost, many consumers aren't sure which features are important, how a peripheral might interface with existing hardware or how a program will work. With the advent of Microsearch, getting solid answers from the experts has never been easier or faster.

Microsearch is a searchable database of microcomputer information provided by Information Inc., a Washington, D.C.-based electronic services and publishing company. It contains more than 20,000 abstracts of product reviews from more than 200 microcomputing publications and product literature from more than 4,500 manufacturers and software publishers.

Microsearch is organized into three categories. Software Information covers software, including business, professional, games, education, scientific and health-related programs. Hardware/Services/Accessories Information includes all hardware for types of microcomputers as well as related products and services. The Directory of Manufacturers provides company names, addresses, contact names and toll-free numbers when available.

Software and hardware categories can be searched by subject, microcomputer or operating system, product name, manufacturer, publication, date or any combination of these search terms. Abstracts also may be searched by document type, which allows you to select magazine product reviews from knowledgeable industry sources or product literature directly from the manufacturer.

The introductory Microsearch menu offers search tips, search terms, a subject thesaurus, microcomputer index and publication index. The system works with you to help narrow a search, and it displays the abstracts in reverse chronological order, so the information you receive first is the most current.

Microsearch has a surcharge of $10 per hour above the usual connect-time fees.

EdVENT II

Continuing education courses and seminars are crucial to most professionals. After all, what better way is there to keep up with current trends and new developments? Until now, however, finding the best classes has been more a matter of chance and good luck than real planning.

EdVent II, a service of Timplace Inc., is a searchable database of more than 100,000 continuing professional education classes, workshops, seminars and other programs. No longer must you depend on haphazard mailings to find the classes best suited to your interest.

Each event description includes the course title, content summary, sponsor, location, date, duration and cost. The programs listed are presented all over North America by more than 5,000 sponsoring organizations.

To get to the database, type GO EDVENT. Once there, select regular (for the novice) or expert mode. Simply type in the subject you are interested in, the location and a range of dates. The system will prompt you for each topic in regular mode (one step in expert mode). It is not necessary to use all three categories when looking for seminars.

First-time users will find detailed instructions in the introduction to EdVENT II and in a demonstration search, both available from the introductory menu.

The search process can be as simple or as sophisticated as you want to make it. For instance, a wildcard feature allows you to type in just the root of a keyword followed by an asterisk (*).

An example of such a search would be ELECTR*, which would then be matched by such keywords as ELECTRICAL, ELECTROCARDIOGRAM, ELECTROKINETIC and ELECTROSURGERY. Obviously, with these diverse results, a wildcard search should not be your only keyword unless it is restrictive enough to eliminate extraneous subjects.

Both the standard and expert mode searches carry a surcharge of $15 an hour above the usual connect-time rates.

When you become adept at online database searching, you become a true power user.

Cathryn Conroy is a contributing editor of Online Today. *Her User ID number is 70007,417.*

A special kind of craftsmanship

Universal Data Systems, the company that developed the first 9600 bps dial-up modem, has now applied its special brand of craftsmanship to the CCITT V.32 specification.

The result is a *full-duplex* 9600 bps device for the switched telephone network. When substandard line conditions are encountered, the device offers automatic fallback to 4800 bps, while maintaining the full-duplex communications capability.

As you expect from UDS, the device fully utilizes the latest in CMOS technology for low-noise performance and very low (less than 20W) power consumption. A new LCD control panel displays and configures modem set-up selections and displays outputs from the unit's comprehensive self-test regime. Auto-dial capability is also included.

If your system must accommodate periodic bursts of high-throughput, full-duplex communication, UDS craftsmanship and the V.32 standard provide a reliable, cost-effective solution. For complete technical details and quantity prices, contact Universal Data Systems, 5000 Bradford Drive, Huntsville, AL 35805. Telephone 205/721-8000; Telex 752602 UDS HTV.

$2495.00
Quantity One

GO OLI or circle 8 on the Reader Service Form.

Universal Data Systems

MOTOROLA INC.
Information Systems Group

UDS modems are offered nationally by leading distributors. Call the nearest UDS office for distributor listings in your area.

DISTRICT OFFICES: **Apple Valley,** MN, 612/432-2344 • **Atlanta,** GA, 404/998-2715 • **Aurora,** CO, 303/368-9000 • **Blue Bell,** PA, 215/643-2336 • **Boston,** MA, 617/875-8868 • **Columbus,** OH, 614/895-3025 • **East Brunswick,** NJ, 201/238-1515 • **Glenview,** IL, 312/998-8180 • **Houston,** TX, 713/988-5506 • **Huntsville,** AL, 205/721-8000 • **Issaquah,** WA, 206/392-9600 • **Livonia,** MI, 313/522-4750 • **Mesa,** AZ, 602/820-6611 • **Milwaukee,** WI, 414/273-8743 • **Mission Viejo,** CA, 714/770-4555 **Mountain View,** CA, 415/969-3323 • **Richardson,** TX, 214/680-0002 • **St. Louis,** MO, 314/434-4919 • **St. Peters,** MO, 314/434-4919 • **Silver Spring,** MD, 301/942-8558 **Tampa,** FL, 813/684-0615 • **Uniondale,** NY, 516/222-0918 • **Van Nuys,** CA, 818/891-3282 • **Willowdale,** Ont, Can, 416/495-0008 • **Winston-Salem,** NC, 919/760-4184

Free Samples

Subscribers Find 'Try Before You Search' Databases

You wouldn't think of buying a car without taking it for a test drive. CompuServe's information providers believe you should have the same opportunity with the services they provide.

Many operators of surcharged reference services offer free searches, demonstrations, tutorials or dry runs to give you an idea of the facts you can find — before you pay extra fees. You can see sample reports complete with actual stock prices, demographics, encyclopedia citations or newspaper articles.

Another benefit of getting the preview is that you will learn how to search through the database to find the report you need. Many services show you how to get the most out of their archives in the least amount of time. These short cuts can trim your online time.

While most forums on CompuServe are without surcharge, a handful of business and research organizations charge fees to use their services. These services are marked on the menu with the symbol "($)" after the service name. If you take note of the ($) symbol, you won't accidentally incur extra expenses.

The try-before-you-buy services seem to be helping many users make informed decisions. "This feature is popular, especially for new users," says Steve Ball, CompuServe product manager. "It gives people a chance to see what they will get. People can view reports without incurring surcharges."

CompuServe offers an extensive database of investment data, including current market stock quotes (delayed 20 minutes); historical prices for stocks, bonds, mutual funds and other investments; financial statements; SEC filing extracts; and company backgrounds and outlooks.

Nearly all of these services can be demonstrated for free by requesting the stock symbol HRB, which stands for H&R Block, the parent company of CompuServe.

Users also can view a broad range of demographic reports through the SUPERSITE (GO SUPERSITE) database available to Executive Option subscribers. A limited library of demographics is available to all users through the Neighborhood Report (GO NEI-13).

"For every demographic report we have a sample," says Vicki Fleet, CompuServe product manager. "It looks exactly like the specific reports they will use. We blank out the area the survey represents, but people can see exactly what they will get."

Users can see any of 50 sample reports to get an idea of what kind of reports are available. Since actual reports cost between $20 and $100, users can be assured that the report they select will meet their needs before they put money on the line.

Here is a sampling of other special surcharged services that either let you test drive programs before you take them for rides on the open road or give you a good feel for how to use their information:

- *The Grolier Online Academic American Encyclopedia* (GO AAE) lets you search through 100 articles from seven categories including contemporary issues, sports, science and the arts. You can find biographies of such persons as basketball star Larry Bird, poet Robert Frost, businessman Lee Iacocca and computer entrepreneur Steve Jobs. The encyclopedia has 31,000 articles and 9 million words and is updated four times a year.
- IQuest (GO IQUEST) periodically has a free promotional offer for one of its more than 800 databases spanning the worlds of business, government, research, news, popular entertainment and sports. When the free database offer is available, it is noted in the What's New (GO NEW) section of CompuServe and on the IQuest menu. A free help service is available by typing SOS at any prompt within IQuest.
- PaperChase (GO PCH) provides free search strategies and command summaries to locate the 4.6 million references found in Medline, the National Library of Medicine's database of biomedical literature. Persons who need help can send an EasyPlex message to the online sponsor, Beth Israel Hospital of Boston at 76703,2003.
- Newsnet (GO NN-9) provides a free general overview of the 300 publications it has in its database and a section on how to use the service. This information is offered through The Electronic Mall.
- Peterson's College Guide (GO PCG) offers instructional information to help students search its database and identify colleges that have qualities they are interested in.
- Microsearch (GO MSH), a database devoted to microcomputer information, provides a guide on how to search for data and allows users to read an index of periodicals that make up the library.

It takes money to make money in the business world. Fortunately, CompuServe's information providers have placed tools at the hands of users so they can get up to speed before they begin paying surcharges to use sophisticated search services.

—Daniel Janal

Grolier's Academic American Encyclopedia is a 1987 copyright of Grolier Inc., Danbury, Conn.

Gift of Time

Actor Researches Dialogues Online

I earn much of my income as an actor from dubbing and "automated dialogue replacement"— the crowd and background conversations inserted into a film during post-production.

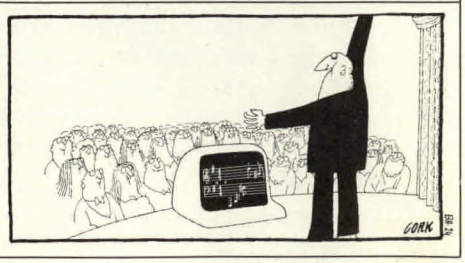
It is sometimes desirable for background voices to be heard, but the conversations must be pertinent to the action. In a scene at a race track, for example, the actors should be talking about horses and odds instead of about their next jobs or their agents.

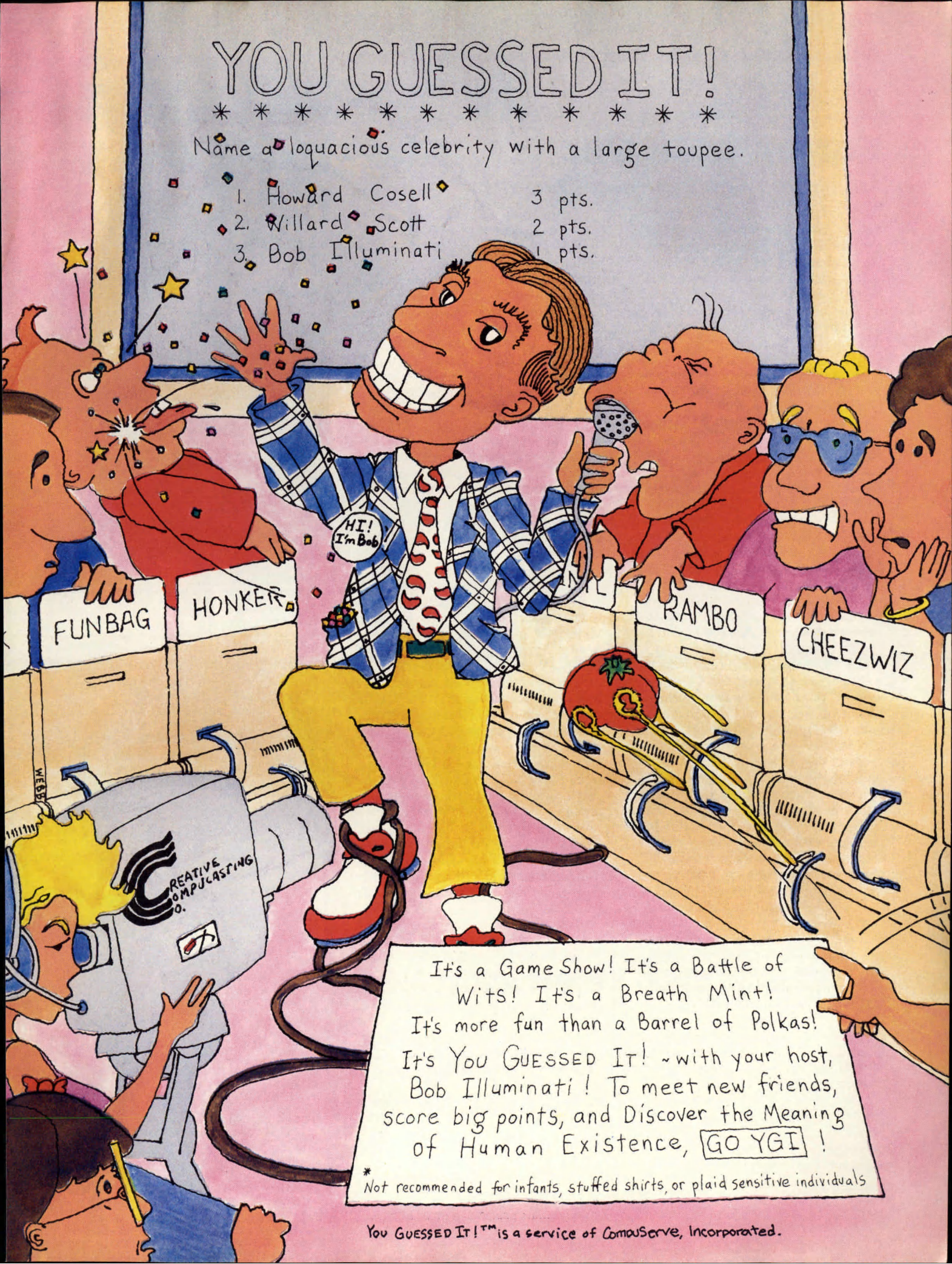
A job can entail hours of library research. With CompuServe, I can complete the work quickly and easily.

For "Star Trek III" and "The Last Starfight," I accessed the Space Forum (GO SPACEFORUM) and HealthNet (GO HNT) for terms. For "The Natural," I used the *Grolier Online Academic American Encyclopedia* for information on sports, politics and news events of 1929 and 1939.

When I have needed information, CompuServe has never failed me, which is something I cannot say about the local public library.

Terrence Beasor
Santa Monica, Calif.




YOU GUESSED IT!
* * * * * * * * * * * * * *
Name a loquacious celebrity with a large toupee.
1. Howard Cosell 3 pts.
2. Willard Scott 2 pts.
3. Bob Illuminati 1 pts.
HI! I'm Bob
FUNBAG
HONKER
RAMBO
CHEEZWIZ
CREATIVE COMPUCASTING CO.
It's a Game Show! It's a Battle of Wits! It's a Breath Mint! It's more fun than a Barrel of Polkas! It's You Guessed It! ~with your host, Bob Illuminati! To meet new friends, score big points, and Discover the Meaning of Human Existence, GO YGI !
* Not recommended for infants, stuffed shirts, or plaid sensitive individuals
You Guessed It!™ is a service of CompuServe, Incorporated.

Forum Idea Clicks

Amateur, Professional Photographers Swap Tips

Are you wondering how to take better photos of your upcoming summer vacation? Perhaps you're a professional photographer looking for help with a tricky lighting problem? Or maybe you're looking for information on that new camera you want to buy.

If you are any of those people, or just interested in photography, the Photo Forum is the place for you, according to Forum Administrator Mike Wilmer, who is a professional photographer specializing in portraiture. Four years ago he bought a Compaq portable computer for his business and soon afterward logged onto CompuServe.

Since every professional photographer Wilmer knew owned or had access to a computer, he thought other professionals would be interested in sharing information online in a photography forum. Wilmer was right. The membership roster exploded from 50 to more than 575 in just five days. Amateur and professional photographers alike were eager to share information.

Professional photographer Wayne R. Morris says the Photo Forum was just what he was searching for. "I was looking for an easier way of exchanging tips, ideas and product information with other pros. I find it simpler to access this forum than to spend hundreds of dollars and time traveling to professional schools, conventions and seminars to get the quick information that is needed."

Gary Davis, forum member and vice president of marketing administration for Vivitar, a major manufacturer of photographic equipment, looks to the forum to share tips on equipment and to learn more about the art of photography. "I can help out with equipment questions, because I am familiar with just about everything on the market, plus stuff that isn't on the market yet."

The forum also has information for someone with Davis' knowledge of photography. "Just by reading some of the messages tonight, for example, I learned even more about selected depth of field and its usage in shooting portraits," says Davis.

The forum is not just for professionals. Many amateur photographers have joined so they can learn more about photography by talking with the pros. Amateur photographer Mike Graff says using the forum is just like talking to someone in a camera shop.

Wilmer says the real strength of the forum is the synergistic nature of computers and photography: "For whatever reason, they seem to go hand in hand."

The Photo Forum goes beyond tips and advice. Forum Subtopic 6 is "Photography as Art." Subtopic adviser Martha Ann Duff hopes to use the forum to educate the public to accept photography as art along with traditional artistic forms such as painting and sculpture.

While Duff frequently finds it frustrating to talk about a visual medium without seeing the photos being discussed, forum member Richard West says trying to imagine the works being described is "a great exercise in stimulating the imagination, which is what the art is about."

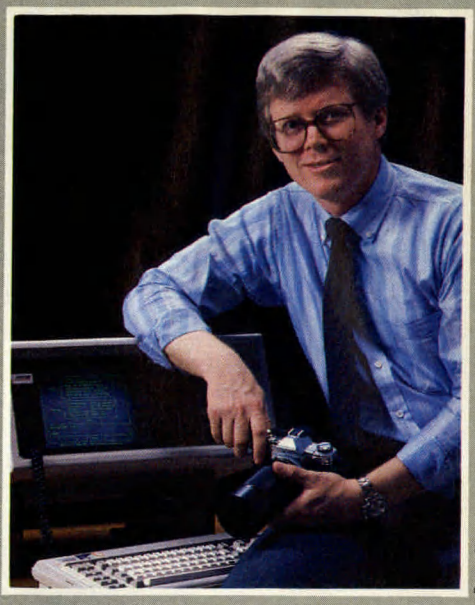
Using the RLE graphics format, Duff and other forum members are able to view high-contrast black-and-white photographs. Wilmer hopes that as color RLE graphic standards are developed a wide range of photos will be accessible to forum members online.

The forum used RLE graphics for its first photo contest in May. Participants uploaded their black-and-white photos in RLE format or mailed them to the Photo Forum's administrator. Davis arranged for free Vivitar 110 cameras to be awarded to all entrants, who then participated in a second contest for photos taken with the 110 camera only. "We hope this will be the first of many contests because the forum is so conducive to them," says Linda Thoirs, CompuServe product manager. "RLE gives traditional photo contests a different twist."

And where would that vacation photographer find tips? In Subtopic 7: Travel Photography. The pro can find lighting tips in Subtopic 4: The Gadget Bag and questions on new products can be answered in Subtopic 5: New Products.

To visit the Photo Forum type GO PHOTOFORUM at any prompt on the CompuServe Information Service.

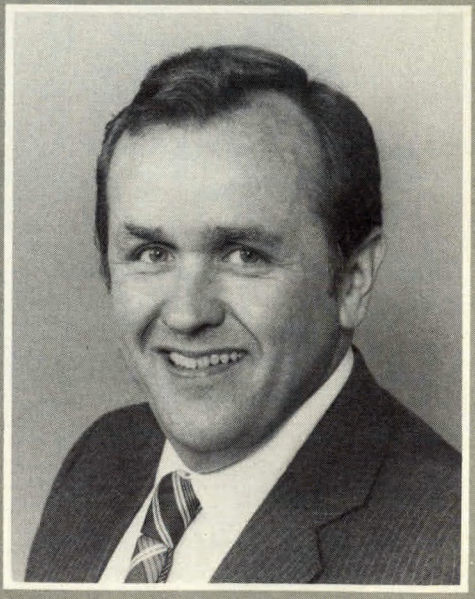
— Camille Ohlson



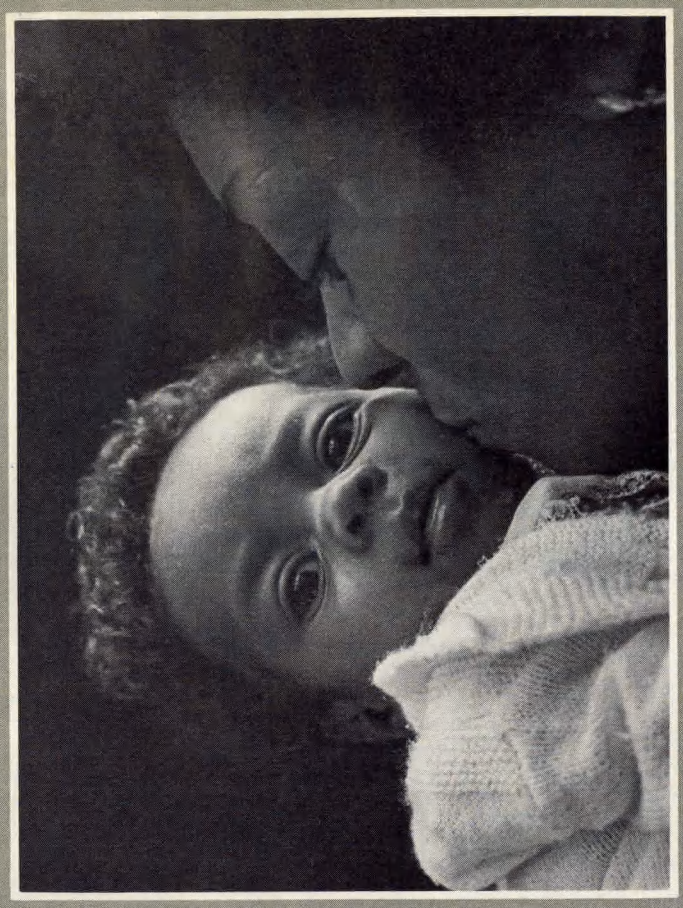
Gerry Baskin

Developing the Photo Forum: *Wilmer*

Portraying photography as art: *Duff*



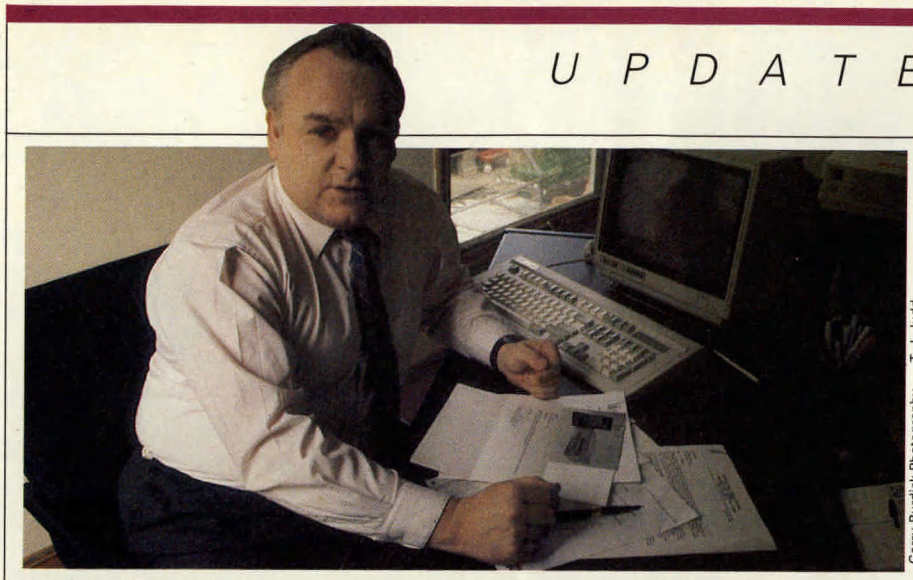
Posed for success: *Davis*



Portraying mother and child: *Wilmer*

Photographing the human figure: *Duff*

Capturing a winter scene: *Davis*



Garry Burdick Photography T. J. Judd

Synchronizing synthesizers: *Stephen conducts new forum for MIDI users*

Making Music on Micros

Computer Forums Tune in to Musical Interests of Members

Remember the old come-on line, "We could make beautiful music together"? Thousands of computer users are doing just that: making music on their computers. And CompuServe is helping these keyboard virtuosos learn to master their new instruments.

The microprocessor initiated a revolution in music technology, bringing computer hobbyists and musicians (amateur and professional) closer together than either had thought possible a few years ago. Although the first electronic synthesizers were marketed in the 1960s, the idea of using personal computers as music machines dates from the early 1980s. Sound chips built into many first-generation home computers turned them into music machines, and software that exploited their musical capabilities quickly followed.

From their inception, CompuServe's personal computing forums were tuned into the musical interests of their members. Musically minded owners of Radio Shack Color Computers can download patches, tunes and programs that keep their machines humming. The Apple forums (GO APPLE for owners of Apple II and III computers; GO MACUS for Macintosh owners) dedicate subtopics to music, with compositions ranging from Beethoven to the Grateful Dead available for forum members to enjoy.

Commodore hobbyists, from the C-64 to the Amiga, can draw upon state-of-the-art scores (GO CBMART for C-64/128 owners or GO AMIGAFORUM for Amiga owners). Two Atari forums, for 8- and 16-Bit machines, include lively discussions and downloadable software for members interested in playing music on their machines (GO ATARI8 or GO ATARI16).

IBM users with a musical bent can check into the IBM New Users Forum (GO IBMNEW) to learn how to use the musical capabilities of their personal computers.

A growing number of hobbyists and musicians are linking personal computers to electronic music synthesizers. These remarkably versatile instruments quickly established their place in today's music. In the studio or on stage, the synthesizer turns one musician into a one-person orchestra, since sophisticated synthesizers can emulate many traditional instruments as well as produce musical effects never heard before the electronic age. Linking them to computers was inevitable. What made it possible, however, was MIDI (Musical Instrument Digital Interface), a protocol that allowed synthesizers to communicate with each other—and with computers.

Before MIDI, a modern keyboardist needed either five pairs of hands or incredible technical skill to play a bank of synthesizers. Now, a single keyboard can control a drum machine, a rhythm generator, a special effects machine and even the lighting in a live performance.

Music, Computers and Software, a magazine that bills itself as "the bible of MIDI," recently joined CompuServe as sponsor of a forum devoted to MIDI users. In less than two years, *MCS* grew to include 60,000 subscribers, ranging from hobbyists to professional musicians. Going online was the logical next step, according to Bill Stephen, editor and publisher, after a survey of readers revealed that half of them owned modems that they used to check electronic bulletin boards and information services such as CompuServe.

For Stephen, the MCS Forum offers a new way to reach hobbyists and professionals who want to know more about MIDI, men and women who "know music but may not know computers."

The emphasis, in the magazine and in the forum, is on applications: how to use MIDI to crank out sound from today's music technology. Serious musicians, whether amateur or professional, are driving synthesizers from their personal computers, thanks to dozens of commercially available software packages that can output music via the MIDI protocol. (Most computers require a separate MIDI box to do this, however.)

Since MCS began publication, the phone has been ringing off the hook with questions from readers about new products aimed at the MIDI music market. *MCS* responded with its *MIDI Buyer's Guide* published in January. But as the MIDI market changes, *MCS* plans to respond through the forum, which will offer regular updates online, drawing on product reviews in the magazine and responses from forum members.

Stephen envisions that the forum message board will answer many of these questions for would-be synthesizer users and for MIDI aficionados who want to know more about the musical possibilities of their hardware. Regular conferences with top-rank musicians and other professionals will help forum members learn how to wring the latest sounds out of their equipment.

Of course, those of us who prefer to listen to music rather than make it can still access CompuServe's Music Forum (GO MUSICFORUM) to swap ideas, opinions and information about records and performances. Or access RockNet (GO ROCK) to stay in step with today's music. To purchase records, tapes and compact discs, you can check catalogs available on The Electronic Mall through Record World (GO RW) to search by artist, group, song or album name; or RCA Direct (GO RC), which specializes in Easy Listening, Classical and Top 40.

—Richard Elias

GoMall

A GUIDE TO COMPUSERVE'S ELECTRONIC MALL JULY/AUGUST 1987

Garden Camera & Electronics, Stereo/Video Factory Open Their Doors

Free-Connect Offers
- AT&T
- AutoVision
- Dean Witter Reynolds
- BMG Direct Marketing

To Challenge Shoppers: *Summer Survival Search*

Plus:
- Complimentary summer book bags from Waldenbooks
- Great interest rates at First Texas
- American Express, Air France unite for Concorde offer
- Your next compact disc could be FREE from BMG Direct

THE ELECTRONIC MALL™

Auctions now online

The Electronic Gavel Drops

DEAR SHOPPER

There is a revolution going on in the world of shopping. All across America consumers are tuning into home shopping shows on their televisions, dialing up toll-free telephone numbers for everything from appliances to zirconia baubles, and browsing the pages of fancy four-color catalogs for cotton clothing, high-tech toys and gadgets galore.

Not since the 1950s — the decade that saw the introduction of the first bank card by Franklin National Bank (1951) and the opening of the first enclosed shopping mall in Edina, Minnesota (1956) — has the way we shop changed so dramatically.

You, as a CompuServe subscriber, are on the leading edge of that revolution. In February of 1985 The Electronic Mall™ opened online, becoming the first computerized shopping service. Today you — and 350,000 other subscribers — have access to more than 70 stores, 24 hours a day, 365 days a year.

But wait. We've only begun. The Mall is getting bigger and better. Mall auctions make their electronic debut in July. We've been hard at work on the project for more than a year now, developing the software and selecting the merchandise. The result is a fast, fun, interactive electronic event with more than 2,000 items up for bid! Other Mall enhancements and events are in store, so stay tuned.

Electronically yours,

Cindy Morgan

HOW TO ORDER FROM THE MALL

Shopping The Mall

Ordering from The Electronic Mall is easy. Each time you enter a Mall store, a personal order file, much like an electronic shopping cart, is opened for you. Browse a store's database, and when you see a product you would like to buy, type the letter "O" and the order will be placed in your file, similar to selecting an item from a store's shelf.

You can order directly from the product description page — there is no need to return to a store's top menu. You can order one item or a dozen. When you type "O," the system does not complete your order; it only registers your desire to make a purchase.

Checking Out

To complete your order, you must "check out." You can do this by typing CHECKOUT, the GO command of the next store you wish to visit or any command that takes you elsewhere on CompuServe. This tells the system you are ready to complete the order process and triggers the next step. You now have two options:

1. You can cancel your order by typing EXIT.
2. You can complete your order by responding to a series of prompts for additional information, such as quantity and your name and address.

When you have supplied the necessary information, you will receive an order summary. You now have the chance to change part or all of your order. For example, if you've ordered three books but decide you only want two of them, you can delete one book from your order. Or maybe you would like to have your order shipped to your office instead of your home. You can make that change, too.

Once you've made any changes, you again will have the chance to review your order. When you confirm the order as correct, you will receive an order confirmation number. *At this point, your order is complete.* It is sent electronically to the Mall merchant's CompuServe mailbox. The merchant then processes the order. The order process is the same for every Mall merchant, but methods of payment and delivery may differ.

If you have questions regarding your order, it is best to contact the merchant directly by using the customer service information provided within each store.

GoMall

***GO MALL*, July/August 1987**
Volume 1 Number 3

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GOINGS ON

Shop AT&T for Free

Subscribers are invited to visit AT&T on Sunday, July 19, when there will be no connect charges. Browse AT&T's online catalog of products and services. Take advantage of AT&T Search Guides — interactive services that identify business products, long-distance services, and phone and answering equipment that meet individual needs. To discover all AT&T has in store, GO ATT.

Open House At AutoVision

Ever longed to be behind the wheel of a BMW, a Rolls Royce or maybe a Maserati? Is there a special occasion approaching at which you'd like to arrive in high style? Would a jeep or a four-wheel-drive vehicle complement a summer family outing?

Visit AutoVision during their Open House on Saturday, July 18, and take advantage of free connect time to request a no-obligation quote for the purchase or lease of almost any vehicle. To visit AutoVision, GO AV.

Available in CA, CT, FL, MA, MI, NJ, NY, PA, VA only.

Free Summer Book Bag

Subscribers making a purchase of $10 or more at Waldenbooks during July and August will receive a free Summer Reading Book Bag while supplies last. This handsome canvas bag is perfect for the beach, the park or other summer destinations. To browse Waldenbooks' selection of books, audio and video cassettes, GO WB.

Browse BMG Direct's Listening Library for Four Days Without Your Wallet

Formerly a service of RCA Direct Marketing

Is the most current selection in your music collection by Diana Ross? *And* The Supremes? Here's your chance to place a fresh face in that whiskered collection.

For four days — the weekend of July 18 and the weekend of August 8 — you can shop the music and video selections of BMG Direct at no cost. For details and info on a second free offer, see the *Spotlight* section. Or, to visit the store, GO BMG.

Dean Witter Reynolds Offers Three Days of Free Connect

Dean Witter Reynolds is picking up the connect-time tab at their Mall store on July 18, July 19 and August 12. Now is the time to discover the myriad of financial services they provide to individual investors — everything from Dean Witter's recommended list to planning for retirement to IRAs and other investments. Dean Witter wants to help you meet your financial goals and welcomes your questions through the Dean Witter Reynold's Open Line. To access Dean Witter Reynolds, GO DWR.

Connect-Charge-Free Shopping During July and August

The following Mall merchants are offering connect-charge-free shopping from midnight to midnight on specified days during July and August.

AT&T GO ATT
Sunday, July 19

AutoVision GO AV
Saturday, July 18

Dean Witter Reynolds GO DWR
Saturday, July 18
Sunday, July 19
Wednesday, August 12

Please note that for Mall promotions that include free connect time, all applicable communications surcharges remain in effect.

BMG Direct Marketing, Inc. GO BMG

Formerly a service of RCA Direct Marketing

Saturday, July 18
Sunday, July 19
Saturday, August 8
Sunday, August 9

Please note that for Mall promotions which include FREE connect time, all applicable communications surcharges remain in effect.

Get the News Every Week

As a continuous, interactive service, The Mall generates news continually. "This Week's Mall News" is a weekly series of articles summarizing important, current goings-on. Stories about new merchants, special sales, free shopping, contests, promotions and more are posted online each Friday on the main Mall menu. Keep abreast of what's happening at The Electronic Mall, GO EMN.

JULY

			1 New AT&T Search Contest and Waldenbooks Book bag Give-away Begin	2 Mall News Appears Online	3	4 Independence Day
5 FLASHBACK—1969: CompuServe Network incorporates	6	7	8	9 Mall News Appears Online	10	11
12	13	14	15	16 Mall News Appears Online	17 Auction: debuts 8–11 p.m.	18 Dean Witter Reynolds, BMG Direct, Autovision FREE Connect
19 Auction Dean Witter Reynolds, BMG Direct, AT&T FREE Connect	20	21	22	23 Mall News Appears Online	24 Auction	25 Auction
26 Auction	27	28	29	30 Mall News Appears Online	31 Auction	

AUGUST

GO BID for most current auction dates, times, and information

1 New AT&T Search Contest Begins

2	3 FLASHBACK—1966: The PL/1 Programming Language Debuts	4	5	6 Mall News Appears Online	7	8 BMG Direct Marketing, Inc.: FREE Connect
9 BMG Direct Marketing, Inc.: FREE Connect	10	11	12 Dean Witter Reynolds FREE Connect	13 Mall News Appears Online	14 FLASHBACK—1962: The FORTRAN Programming Language Debuts	15
16	17	18	19	20 Mall News Appears Online	21 FLASHBACK—1888: Patent Issued for the Burroughs Calculating Machine	22
23 30	24 31	25	26 FLASHBACK—1977: Tandy Corp. introduces the TRS-80	27 Mall News Appears Online	28	29

Mall Auctions Reward Wise Shoppers with Quality Merchandise!

Let the Bidding Begin...

On Friday, July 17, the electronic gavel drops to start The Electronic Mall's first interactive online auction! Know a value when you see one? Bid to buy among thousands of auction items — from computers to bicycles to chocolates.

How Low Will They Go?

You'll decide. Because unlike traditional auctions, where prices rise during bidding, in Mall auctions they will drop if items are not purchased at the suggested starting bid.

Here's how the auction works. Type GO BID anytime during specified auction hours. You'll arrive at The Mall's Auction Center. There you can get more information about bidding procedures, visit an Auction Warehouse, enter the Auction, send feedback to the Auctioneer and more.

Visit the Auction Warehouse

The Auction Warehouse presents descriptions, list prices and asking prices for all auction items. Browse with ease, searching the inventory electronically by product category, merchant name or starting bid. Visit the warehouse beforehand to identify favorites. Return in mid-auction for more information about an item up for bid.

Spot Bargains on The Auction Block
The actual Auction Block screen contains the name and the bid sought for up to 20 items. A separate menu choice will allow you to update this screen with the newest items and prices. This screen is where you'll bid. Be the first to type BUY, followed by the item number of the product, to purchase it at the current asking price.

It Pays to Act quickly
Many items are one of a kind; others have limited supplies. Don't let any be snapped up before you make your intentions known! Pay close attention, too. Prices and merchandise change frequently. And items that don't sell at the original asking bid will be reduced — several times — while still on the block.

Going, Going....
At the auction, forward-thinking consumers have a unique opportunity to purchase quality merchandise at substantial savings. So mark your calendar and plan to gather family and friends for an evening of shopping excitement with a high-tech twist.

The first Electronic Mall auction is set for Friday, July 17, from 8 p.m. to 11 p.m. EDT. Other auctions are scheduled for Saturday, July 18, and Sunday, July 19. Dates and times of additional auctions will be announced online throughout the summer.

"Auction Alert" Sign Up
You are cordially invited to sign up for "Auction Alert" — a special service to Mall patrons. Those who register will receive an electronic notification of all upcoming Mall auctions, including previews of selected merchandise. To register, GO BID and select "Auction Alert."

Visit Stereo/Video Factory for Values on Electronics

A Sharp™ VCR for only $229, a deluxe 45-inch projection color television from RCA, a Zenith Video Camcorder that weighs 2.9 pounds and costs less than $1,000 — all can be found at Stereo/Video Factory, a new Mall merchant.

Stereo/Video Factory offers CompuServe subscribers the opportunity to purchase quality electronics at low prices. VCRs, color televisions, home and car stereo components, CD players and video camcorders, all from leading manufacturers, are showcased online. Brief descriptions of features are provided.

Shoppers can, for example, choose from 20 different VCRs, including models from Toshiba, JVC, RCA and Sharp. More than 20 color televisions, ranging in screen sizes from 9 to 45 inches are also offered. Best of all, prices listed include UPS delivery or common carrier for larger items. To browse Stereo/Video Factory's wide selection of electronic values, GO SV.

Garden Camera & Electronics Offers Discount Prices

Garden Camera & Electronics, in business since 1969 and located in the heart of Manhattan's camera and electronics district, puts the best in brand-name merchandise at your fingertips at low, discount prices. This new Mall merchant carries name brand merchandise you trust, including Minolta, Nikon, Olympus, Panasonic, Pentax, JVC, Uniden and Toshiba.

Shop in an online catalog for a wide selection of cameras, camcorders, VCRs, radar detectors, personal stereos, telephones, answering machines, copiers and more. Recommended for summer road trips: the Whistler Spectrum II radar detector; and for the beach, the Sony DD-100 Boodokahn cassette player, a state-of-the-art portable sound system.

Shoppers are also invited to order a copy of Garden Camera & Electronics' 96-page print catalog, GO GC.

Pool and Spa Gift Books Available for Owners

"If you're a pool or a spa owner," says Jim Robyn, proprietor of Rin Robyn Pool 'N Patio, "we have a gift for you just for visiting us online. Choose from *The Pool Book* or *The Spa Book*, both packed with time-saving tips and maintenance suggestions."

Rin Robyn Pool 'N Patio, a family-run business in operation since 1954, is now enjoying its second season in The Mall. The online catalog features a wide array of pool, beach and backyard merchandise."We have everything you need to have fun in the sun," says Robyn.

"If you're a pool owner, you will be interested in Baquacil, a high-tech chemical disinfection program that replaces chlorine," says Robyn. Baquacil, an odorless polymer disinfectant, is safer than chlorine and fully approved by the EPA since 1981. It is compatible with any finish except white plaster. "If you have any questions about its use with your pool," Robyn says, "contact us by EasyPlex for a prompt reply."

Pool owners will also discover an abundance of pool-related products in the electronic catalog, from a floating phone to floating games — including backgammon, chess and checkers. "The games are great fun in the tub, too," Robyn adds.

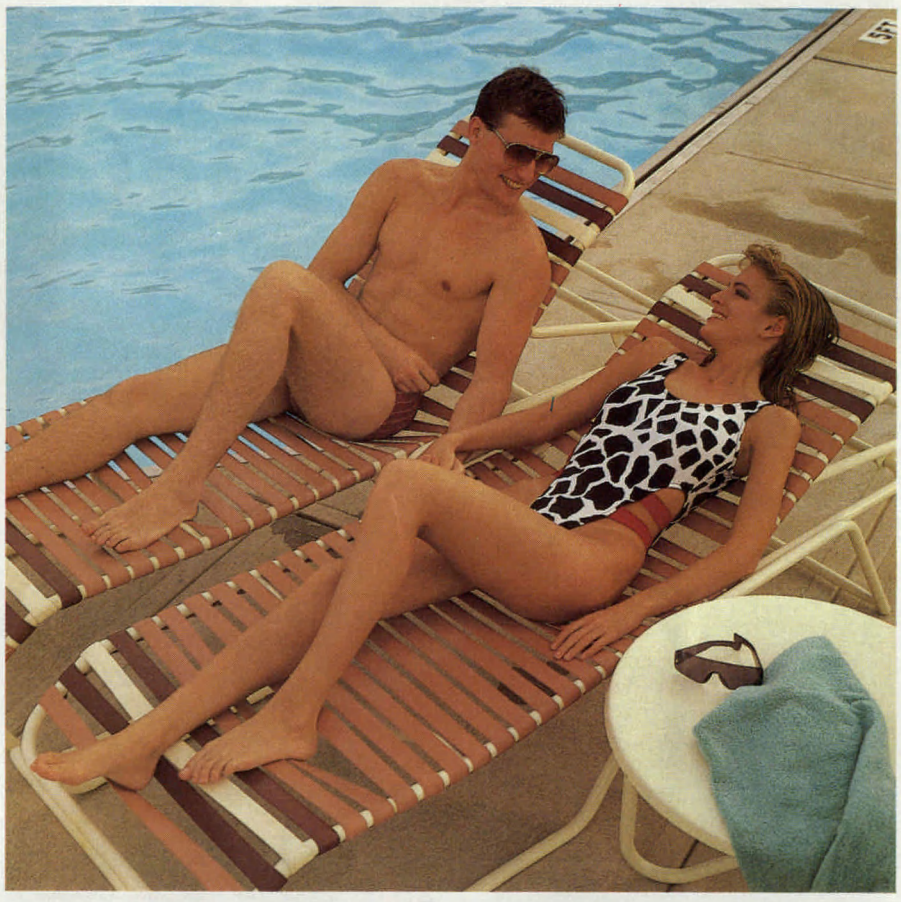
Several products help children learn to swim, including "Swim Baby Swim," a video which introduces youngsters to the water.

Spa owners will discover thermometers, spa vacs, even a spa dome that lets you soak year round. For poolside hosts, there are acrylic mugs, pitchers and other accessories perfect for outdoor entertaining.

"Our hottest item is 'Potted Sound,' a decorative planter with a two-way speaker system," Jim adds.

Beach bound? Rin Robyn Pool 'N Patio carries several inflatables including a raft for two and The Sun Searcher II Float. "Save your breath, though," Robyn says, "we also carry a foot pump that makes blowing up any inflatable a breeze."

To request your free book and browse the Rin Robyn Pool 'N Patio offers, GO RR.



Clockwise, from left: **the Remington Pool Alarm** alerts homeowners via a remote receiver should children or pets accidentally enter the water — battery-powered, $139.99; **this 18-ft. Giant Sea Dragon** is sure to liven your next pool party, $129.95; **the original aquatic rodeo, the Horse Play** sports game comes with four ponies, ball and two goals, $38.98.

FIRST TEXAS®

First Texas Savings Offers Higher Interest Rates

Did you know that interest rates on savings programs in Texas are higher than almost anywhere else in the nation? First Texas Savings invites subscribers to visit their Mall branch and compare rates on Money Market Accounts, CDs and IRAs.

First Texas Savings' Money Market Plus Account, for example, provides high interest on savings with immediate, easy access to funds. A minimum deposit of $1,000 starts your account.

Larger deposits are rewarded with higher rates through First Texas Savings' tiered rate schedule.

The Money Maker Plus Account, fully FSLIC insured, includes check-writing privileges and a Money Maker Plus ATM card, honored at any CIRRUS™ Network automated teller machine in North America.

Start earning higher interest on your savings today. Visit the First Texas Savings branch nearest you, GO FT.

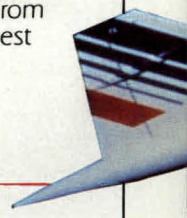
Use Ford Motor Company's Videocassette Library

Visit Ford Motor Company's Mall store to borrow any of four VHS cassettes from Ford's Electronic Library. Features include:

- "Taurus and The Pursuit of Excellence"
- "Fast Lady on a Fast Track" Ford driver Lyn St. James breaks the women's closed circuit speed record with a Mustang GTP Probe.
- "The New Man From Thunder Road" Highlights of Ford NASCAR driver Bill Elliot's heralded 1985 season — exciting racing footage and off-track scenes.
- "The Aerostar Story"

Ford

- Plus, at Ford's Information Service Center you can request free product information on any car or truck featured in the Ford, Lincoln, Mercury or Merkur lineup, including the new subcompact Mercury Tracer and the luxurious Merkur. To borrow from Ford's video library or to request product brochures, GO FMC.



Marymac Discounts the New Tandy 1000-SX and EX

Marymac Industries now offers the Tandy 1000-SX and Tandy 1000 EX. Computer professionals include these IBM compatibles among the premier computers on the market.

The Tandy 1000 runs 50 percent faster than similar personal computers and comes with many standard features normally sold as extras on other systems. Enjoy DOS, BASIC and Deskmate immediately.

Marymac Industries has been discounting Tandy computer products for 10 years. All Marymac Industries' products come with the full Tandy/Radio Shack™ warranty, honored at any of the thousands of company-owned Radio Shack™ stores nationwide. For more information and the lowest prices on Tandy products, GO MM.

Learn Tax Preparation from H&R Block

Where would you turn to learn income tax preparation? Visit H&R Block, the leader in the field of income tax return preparation. The firm has years of experience teaching those who want to prepare their own returns and more than one million former students nationwide.

With the new tax laws, thousands more will discover H&R Block's comprehensive and practical income tax course. The 12-week classes are offered during the fall in more than 2,000 communities throughout the country. Classes are scheduled mornings, afternoons and evenings for your convenience. Courses cover most income tax forms and include lectures, class discussion and practice problems.

Details about the curriculum, dates, times and locations are available upon request, GO HRB.

Air France Expands Summer Service

New flights from Boston to Paris, new nonstop service between New York and the Riviera, new service from Los Angeles to Tahiti and more flights from Washington, D.C. to Paris, are among the highlights of Air France's 1987 summer timetable. Serving eight US cities with more than 40 flights a week, the expanded schedules are the most extensive since Air France began transatlantic service in 1946.

New York-Paris service now includes twice daily 747 flights and a daily Concorde flight. A Sunday eastbound flight and a Saturday westbound flight were added to the 747 schedule in June.

American Express and Air France Join for Concorde Paris Offering

American Express Card members who purchase a round-trip, first-class transatlantic ticket on Air France with the American Express Card®, can now select travel on the Air France supersonic Concorde at no extra charge. The offer includes a limousine ride from the airport to Paris and one night's stay in a premier hotel.

Passengers depart New York aboard the Concorde at 1 p.m., arriving the same evening in Paris. At Charles de Gaulle airport, a chauffeured limousine takes them to the Bristol, Crillon, Plaza, Athenee or one of the airport hotels. This offer is valid through August 31, 1987.

For more on Air France's expanded schedule and Concorde promotion, news on tour packages and free travel brochures, GO AF.

American Express Cookware Promotion Includes Bonus Gift

Discover the beauty and advantages of copper cookware and get a gift from American Express. Throughout July, when you purchase this exquisite cookware, American Express will give you a free cookbook from the editors of *Food & Wine*™ magazine as a bonus — a $19.95 value.

The American Express elegant-yet-functional 13-piece copper set is found in the "Home Sweet Home" section of The Merchandise Shop. The cookware is hand-crafted, hand-polished, hand-finished solid copper with solid cast brass handles that are drilled to accommodate hanging storage. All pieces are lined with gleaming nickel.

The cookware set sells for $149 (plus tax, shipping and handling). Make a single payment or choose the American Express extended payment plan for five monthly payments.

Order this offer in The Mall and your copy of *The Best of Food & Wine — 1987 Collection* is free. This 256-page book is illustrated with dozens of full-color photographs. You'll find gourmet delicacies such as roast asparagus, glaze-grilled swordfish, Grand Marnier souffle — more than 450 outstanding recipes from the pages of *Food & Wine*.

Take advantage of this special offer and discover the wide array of other merchandise, cookbooks and magazines American Express has in store. GO AXM.

Survey the Sounds of BMG Without Spending a Cent!

BMG Direct Marketing, Inc., formerly a service of RCA Direct Marketing, has expanded its online offerings for both new and current members.

To celebrate a new identity, The Mall will waive connect charges to this merchant on Saturday, July 18; Sunday, July 19; Saturday, August 8; and Sunday, August 9.

So, at your leisure and BMG's expense, you can explore the store's extensive database of videos, CDs, Classics and Top Hits during the grand reopening festivities.

Please remember that for Mall promotions that include free connect time, all applicable communications surcharges remain in effect.

Get a Free CD From BMG When You Sign Up Online

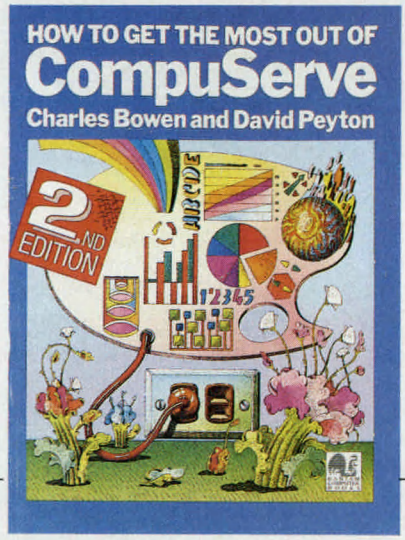
All four BMG Direct Marketing, Inc., clubs — The Compact Disc Club, Video Club, Music Service and The International Preview Society — make online sign-up available.

As a special welcome offer, beginning July 1 the first 100 subscribers to sign up for the Compact Disc Club online will enjoy discounts on their first three CDs and a fourth CD free. It's BMG Direct Marketing's way of thanking you for joining them electronically.

Members Only

Good news for existing members, too. Now, you can place orders for club offerings online. Savings — of time and money — abound on videos, CDs, Classics, and Top Hits.

BMG Direct Marketing, Inc., invites subscribers to discover the advantages of its four clubs today. To visit this Mall merchant, GO BMG.



New Offer at The Small Computer Book Club

Save up to $98.85 on the cover prices of four books when you join The Small Computer Book Club.

If you own an IBM, Apple Macintosh, or Commodore computer, the Club has a spectacular offer for you: a four-book set of guides for your computer, each discounted by at least 93 percent off the publisher's price.

Titles in each set are selected for their user-friendly style and critical reputation. Best of all, you may choose any set — with a retail value of up to $103.80 — for only $4.95.

Free Bonus Book

With the purchase of any set, you also receive *How To Get The Most Out of CompuServe, Second Edition*, free! This book, regularly $16.95, is The Small Computer Book Club's welcome gift to new members, and includes a $6 CompuServe connect credit.

For more information about The Small Computer Book Club's new offer, GO BK.

WINDOWS ON THE MALL

MERCHANDISE/ELECTRONICS

AT&T. The 5500 Answering System, GO ATT.

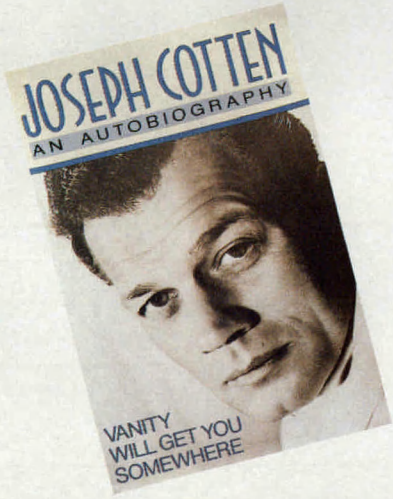
WINDOWS ON THE MALL

AUTO

Chevy Showroom. Buy or sell vehicles, locate hard-to-find parts, exchange hints on repair and service with other subscribers through The Chevy Swap Meet, GO CHV

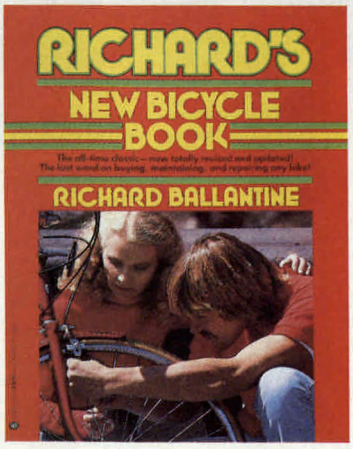
BOOKS/PERIODICALS

Mercury House. *Vanity Will Get You Somewhere* — an autobiography by Joseph Cotten, GO MER



Waldenbooks. Classics for Summer reading — *The Adventures of Huckleberry Finn, To Kill A Mockingbird* and *The Works of Jack London*, GO WB

Ballantine Books. *Richard's New Bicycle Book*, GO BAL

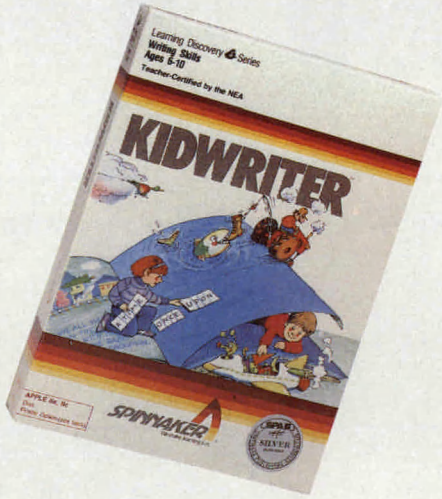


McGraw-Hill Book Co. The McGraw-Hill CD-ROM Science and Technology Reference Set — a 5¼-inch compact disc containing the 7,300 articles found in *The McGraw-Hill Concise Encyclopedia of Science and Technology*, plus the 98,500 terms and 115,000 definitions found in *The McGraw-Hill Dictionary of Scientific and Technical Terms, Third Edition* — compatible with an IBM PC-XT or PC-AT and searchable by nearly any word or phrase, GO MH

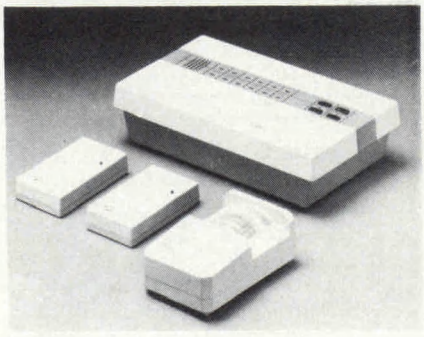
COMPUTING

CDA World of Computers. Apple Memory Expansion Card — Comes with 256K or RAM upgrades to 1MB, GO WOC

Computer Express. *Kidwriter* for the Apple — writing skills for ages 6 to 10, GO CE



Heath Company. Wireless Home Security System — ready to use in minutes, GO HTH



APPAREL/ACCESSORIES

Apparel Concepts for Men Brand-name shoes including Bass, Allen Edmond, Timberland and Rockport, GO APC

Inside * Outside. Hand-painted camisole and boxer set, GO IO

American Express. The Gentleman's Box — a faithful reproduction of the venerable British original, GO AXM

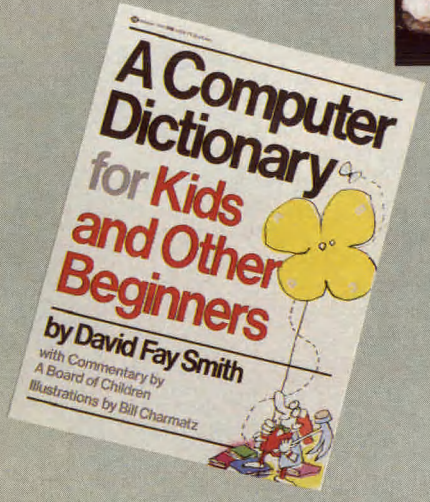
Coffee Emporium. Solar Tea Maker and selected gourmet teas and coffees, GO COF

DISCOVERIES

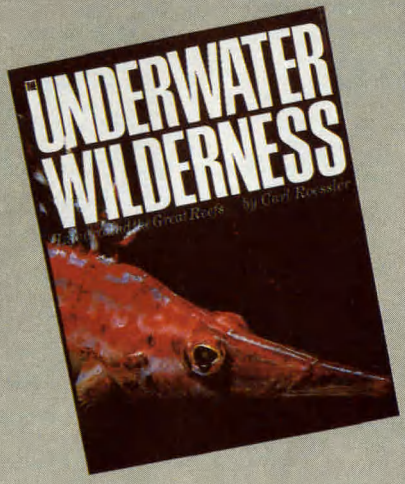
AT&T. 4400 Cordless Telephone, GO ATT

Magic Castle Video. Cult Films — Beta or VHS — *Blade Runner, Repo Man, Dune, Battle-Star Galactica* and more, GO MV

Lincoln Manor Baskets. The Barbeque Basket, GO LM


A Computer Dictionary for Kids and Other Beginners
by David Fay Smith
with Commentary by A Board of Children
Illustrations by Bill Charmatz

Ballantine Books. *A Computer Dictionary for Kids and Other Beginners,* GO BAL



McGraw-Hill Book Co. *The Underwater Wilderness Life Around the Great Reefs* — with 306 color photos, maps and drawings, GO MH

EDITOR'S CHOICE

Waldenbooks. 10 Classics in 10 Minutes — audio tape, GO WB

Icon Review. *SuperPaint* for the Macintosh — combines the capabilities of *MacPaint* and *MacDraw* with exciting new features. Retail $99, on sale for $55, GO IR

Express Music. "Tango In The Night" — the new release from Fleetwood Mac on CD, GO EMC

Software Discounters of America. *10th Frame Bowling Simulator* for the Commodore, IBM and Atari ST; or *Sub Battle Simulator* by Epyx for the Commodore, IBM, Atari ST and Apple, GO SDA

AT&T Congratulates Winners
AT&T's March Birthday Celebration commemorated the 111th anniversary of the first phone call. CompuServe subscribers were able to test their communications knowledge in a quiz.

Quiz winners include:

Gil Machen
Birmingham, Ala.
Margaret Bowman
Philadelphia, Pa.

Machen was the first to answer the quiz correctly. Bowman's name was picked at random from a pool of those who correctly answered the quiz.

AT&T congratulates all winners and invites subscribers to visit AT&T and enter their monthly Search Contests. GO ATT.

EXPRESS MUSIC CATALOG

Express Music Announces Mt. Everest Top Ten Contest Grand Prize Winner
As part of the Mt. Everest Top Ten Contest, subscribers were invited to nominate the 10 compact discs they'd most like to have with them if they were stranded on top of Mt. Everest. Express Music congratulates **Richard Arfin**, whose March Grand Prize includes the 10 compact discs mentioned in his winning entry.

Express Music also congratulates **Mildred Weir**, April's Grand Prize winner. Weir wins a $25 online gift certificate for her winning entry.

Visit Express Music online for the complete text of Arfin's and Weir's winning entries. GO EMC.

SUPER SUMMER

Match these summer survival items with the Mall merchant offering each online and you could win a $12.50 usage credit. It's easy. Simply be one of the first 20 subscribers to supply the correct answers through the official electronic entry form and you win. For details and to enter, see *GO MALL ONLINE*, GO GMO. Good luck!

6. Coconut Willie's Tanning Oil

2. Cordless Grass Shear

4. Floating Telephone

1. Barbeque Sauce

7. Minolta Maxxum 35mm Camera

MERCHANTS

A. McGraw Hill Bookstore

B. Hawaiian Isle

C. Garden Camera and Electronics

D. Rin Robyn 'N Patio

E. Black and Decker Powerline Network

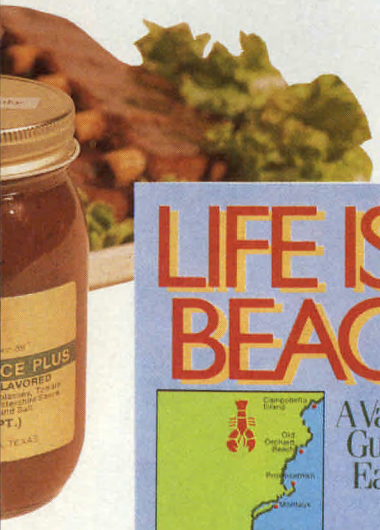
F. Merle Norman

G. Simon David

SEARCH

5. Pawley's Rope Hammock

8. Intensive Moisturizer



3. *Life Is A Beach*

GIFTS/NOVELTIES

Lincoln Manor Baskets. The Ice Cream Lover's Gift Basket, GO LM

PREMIUM MERCHANTS

American Express. Gucci 9000 watches — 18-K gold-plated and stainless steel watches, GO AXM

HOBBIES/TOYS

TSR Hobby Shop. Marvel Super Heroes game, GO TSR

HOME/APPLIANCES

Black & Decker Powerline Network. 2-speed Drill Kit, GO BD

SPORTS/LEISURE

Bike Barn. Bicycle Accessories — helmets, a hand-operated air pump, and bike locks, GO BB

WINDOWS ON THE MALL

GOURMET/FLOWERS

Simon David. "Let's Make a Sundae" Salton ice cream maker — delicious ice cream topping and ice cream scoop, GO SIM

Coffee Emporium. Grand Marnier flavored coffee, GO COF

Florida Fruit Shippers. Imperial Caribbean pineapple, mangos, coconuts, limes and a Tropical Luau, GO FFS

OFFICE/SUPPLIES

Office Machines & Supplies. Sharp SF7100 copier amd supplies, GO OM

MUSIC/MOVIES

Magic Castle Video. Maxell Blank Tapes for Beta and VHS, Package of 10, GO MV

Music Alley Online. MIDI Software, GO MAO

MALL DIRECTORY

APPAREL/ACCESSORIES

APC Apparel Concepts for Men
IO Inside * Outside
MJ Milkins Jewelers

AUTO

AV AutoVision
BU Buick Magazine
CHV Chevy Showroom
DU Dutchess CompuLease
FMC Ford Motor Co.

BOOKS/PERIODICALS

BAL Ballantine Books
DJ Dow Jones & Co.
MH The McGraw-Hill Book Co.
MER Mercury House
BK Small Computer Book Club
WB Waldenbooks

COMPUTING

ATN Aaxion Tech Network
CE Computer Express
GL Great Lakes Business Forms
HTH The Heath Co.
IBM IBM Canada Ltd.
IR Icon Review
IS Investment Software
MM Marymac Industries Inc.
MNU Menu International
SAF Safeware
SDA Software Discounters of America
WOC CDA World of Computers

FINANCIAL

BSW Bowers, Schumann & Welch
INC Business Incorporating Guide
DWR Dean Witter Reynolds
FT First Texas Savings
HRB H&R Block
MU Max Ule Discount Brokerage

GIFTS/NOVELTIES

AK Alaska Teleshopper
EX Executive Stamper
HI Hawaiian Isle
LM Lincoln Manor Baskets
TF Tooth Fairyland

GOURMET/FLOWERS

COF Coffee Emporium
FTH Fifth Avenue Shopper
FFS Florida Fruit Shippers
SIM Simon David
WK Walter Knoll Florist

HEALTH/BEAUTY

BS B&K Beauty Supplies
MN Merle Norman Cosmetics

HOBBIES/TOYS

HC Hobby Center Toys
TSR TSR Hobby Shop

HOME/APPLIANCES

BD Black & Decker Powerline Network

MERCHANDISE/ELECTRONICS

ATT AT&T
ORD CompuServe Store
CFD Crutchfield
GC Garden Camera & Electronics
SV Stereo/Video Factory

MUSIC/MOVIES

BMG BMG Direct Marketing, Inc. (formerly a service of RCA Direct Marketing)
EMC Express Music

OFFICE SUPPLIES

OM Office Machines & Supplies

ONLINE SERVICES

EF EF Hutton
NN NewsNet
OA Official Airline Guides Inc.

PREMIUM MERCHANTS

AXM American Express Merchandise
NM Neiman-Marcus
BAG Woodstock Leather Co.

SPORTS/LEISURE

AF Air France
BB Bike Barn
HF Carolina Health & Fitness
RR Rin Robyn Pool 'N Patio

HOW TO OPEN A MALL STORE

Do you have a product or a service that you think CompuServe subscribers could use? Consider opening a Mall store! Contact the sales office for details.

Kim Cheatham
The Electronic Mall
5000 Arlington Centre Blvd.
Columbus, OH 43220
513/296-4850

WANTED: NEW MALL MERCHANTS

Reach 360,000 CompuServe subscribers with your product or service. To inquire about opening a Mall store, call 513/296-4850 or send an EasyPlex to 70007,1476.

If E-mail enhances your day, Get the Software that enhances E-mail.

PC COMplete for CompuServe!

The most powerful communications software. Specially designed to work hand in glove with **InfoPlex** or **EasyPlex**.

By now you've discovered the beauty of electronic mail. But, wait till you see it working ***unattended*** with your IBM PC.

Automatic E-mail.

PC COMplete™ allows you to create, address and manage your E-mail *off-line*, reducing costly telephone and connect charges. Then, use its hidden power to automatically send and receive mail... ***at any time you wish.***

That's right, whether you're there or not, PC COMplete will wake up, dial CompuServe and send mail from its OUT basket. It will also pick up mail, put it in your PC COMplete IN basket and log off, automatically.

Finally, you can take advantage of lower off-hour rates without being tied to your PC. After the mail session, PC COMplete will be waiting for you with a full IN basket and empty OUT basket.

Mail Management.

Now, off-line mail management features go to work for you. As you start scanning your IN basket you may want to reply to a message. No problem. Just press the "Reply" function key and your message will be addressed automatically to the originator, with subject already filled in. Just type your reply with the easy-to-use, full screen **text editor**.

You can also file, copy, discard or print messages...just like dealing with paper. And transfer files of any type (1-2-3, dBase, etc.), just as easily as messages, using the exclusive **Attach File** feature.

PC COMplete features a pop-up **Address Book** to address messages automatically and supports send options, such as Priority, Confidential and Receipt.

Total Communications.

Features like this would be enough for most software packages, but that's only half the story for PC COMplete.

Speed up and simplify your use of CompuServe, and any other service for that matter, with comprehensive, general purpose communications features.

Automatically log-on to any system, as a standard ASCII or **VT100** terminal. Create function key macros to automate any interaction...checking stock prices, transferring files using **X-modem**, whatever. All this is so simple using the **learn** feature that creates macros for you.

Built-in **DOS functions** mean you won't have to exit PC COMplete to get a file directory and to view, print, rename, delete or even edit a file.

Confirmed Excellence.

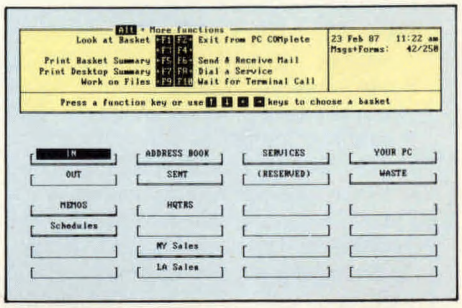
PC COMplete's "Macintosh-like" interface brings all these features to you in a package that's so **easy-to-use** it has been adopted by other mail services, such as GE Quik-Comm, AT&T Mail and CSC Notice, and has earned rave reviews:

"...so well adapted to CompuServe, that you will soon forget how to access it manually." Harry Green, ONLINE TODAY.

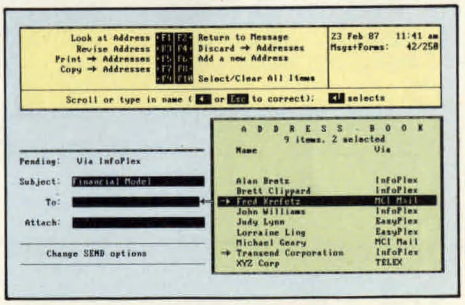
"...easy to use, but sophisticated...a first time user can have it executing its first electronic mail session in half an hour..." DATAPRO RESEARCH CORP.

"I have tried many programs...none of them is as easy to use as PC COMplete." Michael Butler, BANK OF AMERICA.

"...one of the flashiest user interfaces we've seen for the IBM PC." Markoff & Freiberger, SAN JOSE MERCURY NEWS.



The main Desktop screen displays baskets for exchanging and sorting your E-mail.


Look at Address F1 F2 Return to Message
Revise Address F3 F4 Discard → Addressees
Print → Addressees F5 F6 Add a new Address
Copy → Addressees F7 F8
F9 F10 Select/Clear All Items
23 Feb 87 11:41 am
Msgs+Forms: 42/250
Scroll or type in name (← or Esc to correct): ↵ selects
Pending: Via InfoPlex
Subject: Financial Model
To:
Attach:
Change SEND options
ADDRESS BOOK
9 items, 2 selected
Name Via
Alan Bretz InfoPlex
Brett Clippard InfoPlex
→ Fred Krofotz MCI Mail
John Williams InfoPlex
Judy Lynn EasyPlex
Lorraine Ling EasyPlex
Michael Geary MCI Mail
→ Transend Corporation InfoPlex
XYZ Corp TELEX

The pop-up Address Book allows you to automatically address messages.

Order Direct.

PC COMplete...the leading E-mail software...now available for CompuServe.

For **EasyPlex**...as low as ***$59***. Introductory price, $79. Get a *$20 rebate* by returning your old software. Regular price after June 30, 1987 will be $99.

For **InfoPlex**...as low as ***$79***. Introductory price, $99. Get a *$20 rebate* by returning your old software. Regular price after June 30, 1987 will be $125.

Add $5 shipping/handling plus 6.5% sales tax for California residents.

Hardware Requirements: IBM PC, XT, AT or compatible. 256K memory. DOS 2.0+

TRANSEND

884 Portola Road
Portola Valley, CA 94025

(415) 851-3402

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GO OLI or circle 9 on the Reader Service Form.

NEW PRODUCTS

New *MegaWars III* Guide Available

A new *MegaWars III* (GO MEGA3) guide containing updated information about the game's latest online version is available online.

The manual features expanded coverage of planetary management, a chapter about advanced planetary management and new charts for experts.

Beginning players will find the rewritten manual easier to understand. GO ORDER

Photography Forum Now Online

Whether you are buying your first camera or competing for the Pulitzer Prize, you'll find helpful information in CompuServe's new Photography Forum.

Amateurs will learn about the newest films, cameras and photography techniques and get hints from professional photographers.

Professionals will be interested in the number of photographic associations that are planning to provide representatives online to answer questions.

Major photographic manufacturers, magazines and photography buyers also have been invited to participate. GO PHOTOFORUM

EasyPlex Love Messages Permanent

Due to popular demand, electronic Love messages will remain a permanent EasyPlex feature.

Electronic Love messages are personalized electronic messages, formatted in a special "Love" design, that may be sent to any CompuServe Information Service subscriber or MCI Mail user. GO EASY

WCT Now Includes 88 Destinations

Lee Foster, a professional travel writer known for his research on travel in the western states, has increased the Special Interest Travel in West Coast Travel sections to 88 western state destinations.

West Coast Travel will offer 100 destinations by the summer of 1987, according to Foster. He plans to add Idaho and New Mexico sections followed by additions to the California, Nevada, Colorado, Montana, Wyoming and Oregon sections. GO WESTCOAST

Guides Help Users Locate Software

The *Best of IBMNET Public-Domain Software* and four similar printed guides for the Amiga, Model 100, Atari 8-Bit and the Macintosh Users' Forums now may be ordered online.

The index of each guide organizes the software by subject. Each entry contains the filename, the file's description, the name of the individual who uploaded the program, the upload date, storage size and the location of the file by forum and data library.

Each guide costs $9.95 plus $2 shipping and handling. GO ORDER

Reduced Rates Now Permanent

The trial reduction of CompuServe Information Service daytime connect rates to standard evening and weekend rates is now permanent.

Subscribers can access the service any time for $6 per connect hour at 110 to 450 baud speeds, a more than 50 percent reduction from the previous daytime weekday rate. Access is $12.50 per hour for 1200 to 2400 baud.

All CompuServe services, except where noted otherwise online, will be available at the new rates. All product and telecommunications surcharges remain in effect.

Take advantage of the lower rates to explore new areas of the Information Service. GO RATES

Einstein Now on CompuServe

Einstein, an online research and reference tool designed to meet the information needs of students and teachers, is now available on CompuServe.

Organized like a school curriculum, Einstein features the arts, science, business, general reference, education and technology and accesses nearly 90 databases of six online services including Dialog and Wilsonline.

Einstein's menus guide you from general topics to specific interests. There are no complex commands to retrieve information, and you are prompted for search terms. Instructions, search guidelines and examples are available online. Each Einstein search costs $4. GO EINSTEIN

Chess Game Popular with Players

Check, checkmate, check out the new two-player *Interactive Chess Game* that many CompuServe subscribers have requested.

You begin the game by entering the parlor to meet other players and watch others play chess. When you are ready to play a match, type /PLAY and a table will be reserved for you.

Chess moves may be submitted in descriptive or algebraic notation. You also can exchange messages with your opponent and the spectators. Your screen may be set to display both players' board perspectives. GO CHESS

Terrain Added to *ATC* Game

A new version of CompuServe's *Air Traffic Controller*, a game that simulates air traffic controllers' duties, now features "dynamic terrain" at difficulty levels of six and above.

As you guide the planes through your assigned air space sector or to an airport, you must adjust the planes' altitudes to clear mountains. Terrain is generated randomly and is related to the difficulty level. GO ATCONTROL

Eyes Hurt?

UltraViolet radiation is produced by the glowing phosphors of a computer screen. When reverse video is used, as with the Macintosh, higher levels of UV are produced than with conventional monitors. This UV light can cause pain in the eyes of sensitive individuals.

If your eyes hurt when using a Macintosh, chances are your eyes are sensitive to UV. Eye-Guard MXP is made of 30% lead-impregnated acrylic, designed to block several important types of radiation, including UV. It's the same material used to protect workers in hospitals and nuclear power plants, and also blocks microwave and x-ray radiation that may be generated by your computer in small amounts.

We guarantee that Eye-Guard MXP will 100% eliminate your eye pain, or we'll refund your purchase price in full. Eye-Guard's are in use in thousands of offices and government buildings all across the US. Order yours today and experience the pleasure of pain-free computing. At $169 plus postage and handling, the Eye-Guard MXP is much, much more than just another glare filter. It's relief for your tired eyes, and soon pays for itself in increased productivity.

For more information or to order, call toll-free,

(800) 221-7070

Langley-St.Clair

Instrumentation Systems, Inc.

132 W. 24th St., New York, NY 10011

CompuServe: 70007,1176

GO OLI or circle 10 on the Reader Service Form.

Ask Customer Service

Q: What areas of CompuServe support graphics?

A: Some of the popular areas for graphics are the following: Picture Support Forum (GO PICS), CB Bulletin Board (GO CBIG), FBI Ten Most Wanted List (GO FBI), VIDTEX Weather Maps (GO MAPS) and the Missing Childrens Database (GO MIS). For a complete list of areas that support graphics, type FIND GRAPHICS at any prompt.

Q: What types of graphics does CompuServe support?

A: Currently CompuServe supports three types of graphics—RLE, ANSI and NAPLPS. Most of the graphics online are in the RLE format, which can be viewed by almost any type of computer available.

Q: Where can I receive detailed information on RLE graphics?

A: For detailed information on RLE graphics, read the file RLESTD.ASC in Data Library 0 of the Picture Support Forum. This file includes all of the standards of the RLE format and can be downloaded.

Q: What is RLE and how do I view a graphic picture?

A: RLE stands for Run Length Encoded. This format can be used on almost any type of computer. To receive the graphic picture, you need to use a communications program that supports graphics such as CompuServe's VIDTEX program.

If your communications program does not support graphics, you can use a graphics utility program written for your computer to decode the RLE file and display it to your screen. Some of these utility programs allow you to save the decoded picture to a binary file. It is then possible to redisplay, edit or print the file if you have a graphics program such as Mouse Paint for the Apple or PC Paint for the IBM. These utility programs are available for downloading from the Picture Support Forum (GO PICS) or the hardware forum for your computer (GO HARDWARE).

Q: How do I download these graphic utility programs?

A: First, choose the utility program for your computer from the Picture Support Forum's Data Library 0. At the DL 0 prompt, choose the option to "Browse." At the next prompt, "Oldest file in days" hit the Return key to receive the complete selection of programs. You will then be taken through the list of all of the programs available for your computer. After reviewing these files you will have the option to download. Additional instructions are available in your software manual and in the hardware forums.

—Tim Wheeland and Sally Wardlow

These answers and more are available in Customer Service's Question & Answer Database. You can find answers to questions about billing, logging on, using forums, sending EasyPlex messages, using the Personal File area, setting up a Personal Menu and more. GO QUESTIONS

AT&T IS IN COMPUTERS.
YOURS.

GO ATT and take advantage of AT&T SEARCH.
Access our on-line catalog of AT&T products and services.
Receive assistance in choosing the right one for you.
And enter our monthly contest for a chance to win the
$25 Grand Prize!

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GO OLI or circle 7 on the Reader Service Form.

AT&T
The right choice.

Databases Keep Track of Bulls and Bears

Has there ever been so much public interest in the stock market and, at the same time, so much public confusion?

It used to be a game only for the rich. Now more of the middle class are finding that buying and selling stocks and other securities can be intriguing and potentially enriching.

As small investors have moved deeper into the market, computers have helped them unravel the mysteries of the bears and bulls.

Perhaps you've noted stories in the past year about how drops in market prices often can be attributed directly to computer software in some of the biggest brokerage houses in America. Data is constantly being entered into computers in these firms. Elaborate programs constantly analyze the market and tell when to buy and sell. When the computers said, "Sell, the market is going to drop," the floor traders complied. Some say it was a self-fulfilling prophecy. But it continues to work time and again.

Maybe you can't afford one of these programs that costs thousands of dollars. But through CompuServe, you have access to current market prices 20 minutes after each trade has been completed. You can also use CompuServe to obtain daily, weekly or monthly histories on individual stocks as far back as 1974. And all data comes from sources trusted and used by hundreds of market professionals, including some of the largest investment banks in the country.

If you are interested in the stock market, you owe it to yourself as a CompuServe subscriber to investigate the extensive stock databases available to you.

Perhaps you are one of those who did not subscribe to CompuServe primarily for its business information. Maybe you've heard that much of the securities information on CompuServe is surcharged and you fear that you'll wind up having to sell a share of Grandpa's AT&T stock to pay your bill.

Relax. Once you begin exploring CompuServe's securities services you may learn that the prices charged are worth their weight in gold.

We can show you how to sample two key securities tracking programs on CompuServe and not spend a cent in surcharges. All it will cost you is the online time it takes to do the research.

Perhaps the backbone of CompuServe's securities services is Quick Quote, which allows you to easily determine what the price of any stock was 20 minutes ago. Twenty minutes after all markets close for the day, the quote you'll see is the closing information.

To get to Quick Quote, type GO QQUOTE at any system prompt on the service. When you arrive there, you'll see a prompt that says ISSUE:. At this prompt type the ticker symbol for the company you're seeking. There is a small surcharge connected with each

quick quote you obtain. There is, however, one you can obtain without a surcharge. It is the quote for H&R Block, the parent company of CompuServe.

At the ISSUE: prompt, type HRB and press the Return key. You'll see a line of information containing the number of H&R Block shares traded (expressed in hundreds of shares) the high and low prices for the day, and the change since the end of trading yesterday. You'll see one figure labeled "Last." If you're getting the information while the market is still open, the "Last" figure will be the price at which the stock last traded as of 20 minutes ago. The figure labeled "Update" reflects the actual time the trade took place. If you're getting the information after the close of the market, "Last" will mean what the stock was trading for at the close of that day.

After the quick quote on HRB appears, you'll see the ISSUE: prompt again. If you press the Return key at this prompt, you'll go back to the QUOTES menu with the familiar system prompt.

Another important securities database where information about H&R Block is free of surcharge is the pricing history database (GO PRICES). This one gives you daily, weekly or monthly pricing information about a stock. Once again, when you first enter this database, you'll see the ISSUE: prompt. Type HRB. Next, you'll be asked if you want to see (D)aily, (W)eekly or (M)onthly statistics. To see how this database works, type M and press the Return key. Press Return again at the next prompt to begin counting backward from the last date the market was open.

Next, you'll be prompted for the number of months you want. Type 12 and press Return to see monthly information about H&R Block stock for the last 12 months, including total shares traded, the highest and lowest prices at which H&R Block stock sold during each month and the last price at which it sold at the end of the month. You can access HRB information as far back as August 26, 1974.

These are two of the many securities services that can help you make sense of the securities market. To see a list of such services available, type FIND STOCKS at any system prompt. While some of the services are surcharged, several allow you to use the HRB ticker symbol surcharge-free.

If you would like written documentation about such services on CompuServe, type GO ORDER and see what is available under "Information Brochures." The financial brochure explains these services. The *CompuServe Almanac* provides a description of each specific service. For more personal help, try the Investors' Forum (GO INVFORUM).

Whether you're a serious investor or merely a part-time gameplayer, you can explore the online securities services CompuServe has to offer.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

New Files Improve Computer Efficiency

The data libraries in CompuServe's forums are filled with thousands of programs and textfiles. The following are a few of the files uploaded to the data libraries in recent months. For more "Uploads," type GO OLT-3700.

AMIGA FORUM
(GO AMIGAFORUM)

BBS Listing — Current listing of known Amiga Bulletin Board Systems, including MIDI-oriented boards. File BBS.TXT in Data Library 4.

Modula-2 — The Amiga Forum has added a new data library for Modula-2 files. The files in the forum's Data Library 13 include VIEWTE.ARC, a file-viewing program and startup module; M2FIX2.ARC, bug fixes for TDI Modula-2 rel. 3.00a; EASY.LNK, EasyGadgets.lnk fix for TDI Modula-2 rel. 3.00a; and M2CONV.LNK, M2Conversion.lnk fix for TDI Modula-2 rel. 3.00a.

ASHTON-TATE FORUM
(GO ASHFORUM)

Bar Graph — Works with dBase III and III Plus to generate a bar graph. It will graph any number less than 100, rounding to the nearest multiples of 5. Several numbers may be graphed simultaneously. File BARGRA.ARC in Data Library 2.

ASTRONOMY FORUM
(GO ASTROFORUM)

Meteor Reminder — A program for MS-DOS based computers that is a meteor shower reminder system. Files METEOR.COM, METEOR.DB and METEOR.DOC in Data Library 7.

ATARI 16-BIT FORUM
(GO ATARI16)

A version of Space War, similar to the old Atari coin-operated game. Keyboard controlled and requires two players. File SPACEW.ARC in Data Library 1.

ATARI 8-BIT FORUM
(GO ATARI8)

Improved DOS — An improved version of DOS 2.5. Improvements include maximum speed with HAPPY drives, RAM disk for 64K XLs, improved filenames and custom character sets. File DOS25P.SCR in Data Library 3.

AUTODESK FORUM
(GO ADESK)

Learning Help — A brief description of the current books and tutorials written for AutoCAD and AutoLISP. Publisher and contact information is provided. File BOOKS.AI in Data Library 12.

COCO FORUM
(GO COCO)

Disk Formatter — A basic utility that allows you to use FSTDP4 to format disks on both sides in the 64K mode and running a modified DOS in memory. Requires FSTDP4.BIN in the same data library. File FSTDP.MOD in Data Library 3.

COMMODORE ART/GAMES FORUM
(GO CBMART)

Arcade Game — An attack game. Requires joystick in Port 2. File ATTACK.IMG in Data Library 8.

Wheel of Fortune — The Wheel of Fortune Game for the Commodore. File WOF.IMG in Data Library 11.

COMPUTER CLUB FORUM
(GO CLUB)

Sanyo Program — A new version of Danny West's checkbook manager for the Sanyo. Improvements include sorting and other functions, improved speed, new graphics. File CK-MGR.ARC in Data Library 2.

EPSON FORUM (GO EPSON)

Time Manager — A RAM-resident, key-activated time display/alarm for the QX-16. File CHRONO.COM in Data Library 1.

IBM COMMUNICATIONS FORUM
(GO IBMCOM)

Comm Package — GT PowerComm, a complete communications package including a host mode, for IBM computers and compatibles. To see all the files in the package, type BRO/KEY: POWERCOMM at the Data Library 3 prompt.

IBM HARDWARE FORUM
(GO IBMHW)

PS/2 Information — The IBM Hardware Forum has opened Data Library 9 for the IBM PS/2 system. The file PS2.ARC in the new Data Library 9 contains virtually the entire IBM announcement of the PS/2 and other products announced on April 2, 1987.

IBM NEW USERS FORUM
(GO IBMNEW)

PC Clock — A program that displays a full face clock with a sweep second hand, hour and minute hands in medium resolution. Beeps on the minutes and chimes on the hour. Requires CGA card. File FULLTI.ARC in Data Library 5.

INVESTORS' FORUM
(GO INVFORUM)

Wavewatch — An edited transcript of the April 2, 1987, conference with Glenn Neely, editor of Wavewatch and president of the Elliott Wave Institute. Neely outlines the Elliott Wave Theory and applies it to the stock, futures, metals and currency markets. File WAVE.CO in Data Library 10.

JOURNALISM FORUM
(GO JFORUM)

Job Tips — An experienced photographer gives advice to those seeking television or print photography jobs. File WANTAJ.TIP in Data Library 9.

KAYPRO USERS' GROUP
(GO KAYPRO)

Diagnostic Help — A collection of diagnostic files for CP/M Kaypros. Included are utilities to test memory and disk drives as well as useful auto utilities. File KPDIAG.LBR in Data Library 1.

MICROSOFT FORUM
(GO MSOFT)

OS2 Conference — Edited transcript of the first Microsoft online conference about the new operating system OS/2. File OS2.CO in Data Library 0.

MODEL 100 FORUM
(GO M100SIG)

Epson Help — A program for creating, storing and downloading user-definable character sets to Epson FX series printers. File CHRGEN.BA in Data Library 2.

RACING FORUM
(GO RIS)

Racing Schedule — The combined listing of all scheduled motor racing events in 1987. File is updated monthly. File RACE87.SKD in Data Library 0.

SPACE FORUM
(GO SPACEFORUM)

Shuttle History — A summary of shuttle flights — STS-1 through STS-51L. Includes launch/landing data and mission times. File STS.TXT in Data Library 1.

TANDY PROFESSIONAL FORUM
(GO TRS80PRO)

Expanded Directory — A utility for TRSDOS 1.3 (Model III) that reads the disk directory, sorts it and allows the user add a 48-character comment line that can be edited. File CDIR.CMD in Data Library 2.

David Peyton co-authored How to Get the Most Out of CompuServe *and* Advanced CompuServe for IBM PC Power Users. *His CompuServe User ID number is 76703,244.*

Find Facts Fast

Professionals Capture Business Data through IQuest

Researching a competing company's financial history or pinpointing potential customers in a new marketing area can consume hours of valuable time. Now business professionals can locate this information quickly by accessing the vast resources of IQuest, which serves as a gateway to more than 800 publications, databases and indexes. It scans volumes of data and thousands of sources to find the information you need, when you need it.

Using IQuest involves the standard online charge, plus a $7 charge for each search of a database. Some databases — about one in 10 — carry an additional surcharge. IQuest will display this charge before the search and ask whether you wish to continue.

After accessing IQuest, you will have a choice of IQuest-I or IQuest-II. IQuest-I will lead you through a series of menus that narrows your search to the specific information you are seeking. However, if you already know which database you want, select IQuest-II ("You pick the database") and enter the name of the database. The next menu will ask for your search topic and offer a list of search options. Using either IQuest-I or II, you will be able to gather information about a product, brand name, geographical area, company or other feature.

Seth Horwitz, manager of User Services for Telebase Systems, which provides IQuest to CompuServe subscribers, reports that the databases described below are among the ones most frequently accessed by business people.

D & B Dun's Market Identifiers

For such information as a list of textile mills located in Chicago, Horwitz recommends accessing this database. It contains a brief description of more than 2 million companies, including basic identifying information, number of employees, names of top corporate officers, last year's sales figures and square footage of its main office or plant.

Disclosure

If you're considering working for — or even buying — a public company in the United States, Disclosure will help you make that decision by displaying that company's general financial statement. This database contains financial data derived from documents that public companies are required to file with the Securities Exchange Commission.

Standard & Poor's News

Has a publicly held company just released a new product that competes with yours? Read the most recent information on it, including press releases and other reports on thousands of publicly held companies using this database.

Thomas Register Online

Let's say you're looking for a new supplier and want to know which companies in the Houston-Dallas area manufacture computer chips. Using this database, you can type in the trade or product names you're interested in, plus the targeted geographical area, and download a list of companies producing computer chips in that region. With 125,000 private and public American manufacturers online, Thomas Register also enables you to type in a company name and receive a list of its products and their trade names.

PTS PROMT

Through this database IQuest offers all the business magazines available in the best-stocked library. What's more, the issue you want is never missing! If you want an analysis of a company merger, for example, PTS PROMT provides clearly indexed abstracts from national and international business magazines. If you need more in-depth information, you can order a reprint of the full article.

Trade and Industry ASAP

Your profession's trade journal or magazine may be among those listed in this database, which offers the full text of articles from selected sources. (For a bibliography of articles from a wider range of trade journals, access the Trade and Industry Index. You can order reprints of articles online or locate the articles in your local library.)

FASTOCK

Whether you just dabble in the stock market or are a serious investor, be interested in FASTOCK because it offers information gathered from a dozen stock exchanges. FASTOCK illustrates in chart form the performance of specific stocks and bonds every day during the past year or every week for the last four years.

To use IQuest more efficiently and cost-effectively, Horwitz recommends deciding exactly what information you want before you begin. If you need help online anytime day or night, type SOS at the prompt and a trained online reference librarian will answer your questions, explain the system and guide you to the databases that will be most helpful. There is no fee for the SOS service beyond the normal connect charges.

For more information about IQuest, see the online alphabetized index of IQuest reference sources, or order a free eight-page IQuest Database Directory by typing GO IQUEST at any prompt and selecting "More Information About IQuest" from the first menu.

—Linda Barr

Business Briefs

OTC NewsAlert Debuts

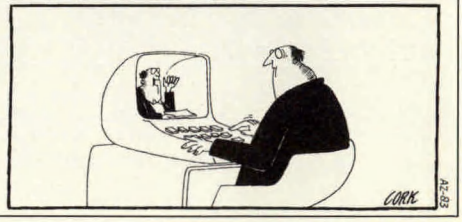
OTC NewsAlert is a service describing activities that could affect stock prices of small companies that trade over-the-counter.

Users can search both recent and historical articles featuring summary earnings reports, large sales contracts, new products, acquisitions, takeovers and movements of large blocks of stock by corporate insiders.

OTC NewsAlert may be searched by either company name or ticker symbol for articles about the initial public offering of securities for companies, for example, that are just going public and could be stock bargains.

For future articles, users may set up a clipping file through the Executive News Service to follow both the individual company and industry trends.

Users can get in-depth financial information on companies through Disclosure II (GO DISCLOSURE) and follow prices by using MicroQuote and Quick Quote. To access OTC NewsAlert, type GO OTCNEWS.



Software Forum Helps Small Businesses

If you'd like to maximize the effectiveness of such Monogram software products as Moneyline, Dollars and Sense or Forecast — or if you'd like to try demonstration versions of these products — the new Monogram Software Forum is the place to look. Demonstration versions are located in the forum's data libraries.

Developed by Monogram, a California-based software firm, the products are primarily for individuals, but also can be used for small business applications, according to forum administrator and Monogram employee Richard West. West describes the products this way:

- Dollars and Sense is for the management of checking and other types of accounts — such as expenses, assets and liabilities — that require direct access for entering new transactions. Because all versions of Dollars and Sense are non-copy-protected, they can be used to produce and print or display a variety of reports and graphs. The three versions of Dollars and Sense include version 2.0 for IBM and IBM-compatible equipment; version 1.4 for Macintosh and Macintosh Plus computers; and version 1.5 for 128K Apple IIe, IIc and IIGS computers.
- Moneyline West and Moneyline East work with the Bank of America and Citibank, respectively, to enable users to download transactions from the banks' computers to Dollars and Sense software and to carry out electronic funds transactions. Use of these programs, which run on IBM, Macintosh and Apple computers, must be preceded by some paperwork through the appropriate bank.
- Forecast, a tax estimating and planning program that runs on IBM and IBM-compatible equipment. West says that like other CompuServe forums, the Monogram Software Forum has a conference area, message board and data libraries. In addition to demonstration products, the data library contains answers to a variety of customers' questions from the general — "How do I get an update or upgrade to my product?" — to the specific — "How do I copy the current Apple version to a 3.5-inch UniDisk?"

At the outset, West plans monthly conferences that will be increased to weekly online meetings if the demand is present. "I'd like to hear from members to find out who they'd like to talk with online," he says.

"Uploaded samples of specific uses will be shared with others through the data library." West adds that the data library also will be a place for users to suggest enhancements to the Monogram product line.

To access the new Monogram Software Forum, type GO MONOGRAM at any prompt.

—Carole Houze Gerber

For More Business Information

To obtain more information about capabilities offered to CompuServe's business information customers, contact the CompuServe branch sales office nearest you:

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501

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ThinWrite 100:

A Battery-Powered Portable Printer

Axonix Corp.
417 Wakara Way
Salt Lake City, UT 84108
801/582-9271

Computers: Any computer with Centronics-compatible parallel or RS-232C serial interface.
Features: Nine-pin bidirectional printing with logic seeking on lines up to 8 inches long; draft quality printing at 100 cps and near-letter-quality printing at 25 cps; pica (10 cpi), elite (12 cpi), condensed pica (17 cpi), condensed elite (20 cpi) and enlarged (double wide) fonts; proportional, subscript, superscript, italic, standard density, double-density, emphasized and double-struck character modes; American, English, German, French, Swedish, Italian and Spanish character sets; multiple bit-mapped graphics modes; compatible with IBM Graphics Printer for software setups; battery or AC power operation; measures 13.1 inches wide by 7.7 inches deep by 2.8 inches high and weighs 6.5 pounds.
Option: MobilCharge automotive power adapter for 12 VDC negative ground power source.
Systems used for test: 640K Toshiba T1100 Plus Portable Personal Computer and 640K Compaq Deskpro driving ThinWrite 100 printer with and without Computer Accessories' 64K Print Saver buffer.
List Price: $479, including tractor feed, acoustic dust cover and AC power adapter/recharger.

Reviewed by Ernest E. Mau

Self-contained portable computers free us from power-line umbilicals and let us take our computing almost anywhere. Yet if we need printouts while traveling, conventional printers are anything but portable. Now, Axonix' ThinWrite 100 makes printing almost as ambulatory as laptop computers.

The ThinWrite 100 Impact Dot-Matrix Printer is about half the size and a little more than one-third the weight of an Epson FX-85. Its dominant feature is battery operation, so it is usable even where it is impossible or inconvenient to plug into a wall outlet. Of course, it is rechargeable and can run directly from AC power via a transformer.

Like any device, battery operation is limited. The manual says a 16-hour charge should print more than 175,000 characters. Continuous self-testing should run for at least 25 minutes. Those figures are reduced by 10 percent when using the RS-232C interface. Owing to variations in printouts, actual times vary. I get about three pages of bit-mapped graphics plus a dozen pages of single-spaced text before a flashing front-panel power light shows 50 percent discharge.

The printer has an automatic shutoff switch that selects fully off or low-power status when the main power switch is off. One position kills power entirely and provides maximum battery life. The other keeps things partially powered while the main switch is off but slowly discharges the battery.

Most users would rely on battery operation only for short intervals when other power isn't available. It is natural to assume the unit would connect to AC power and maintain full charge at all other times. The manual cautions against that, implying that the battery pack's service life may be reduced by not unplugging the unit after charging.

ThinWrite 100 is compatible with the IBM Graphics Printer. Although the manual doesn't say it, graphic and non-graphic software may be set up for an IBM Graphics Printer. Epson FX-80 or FX-85 software setups often work as well.

Compatibility is critical, so I drove ThinWrite with what I consider "printer buster" software. Horstmann Software Design's ChiWriter, Lifetree Software's Volkswriter Scientific and American Small Business Computers' ProDesign II often find flaws and fail in one or more printing modes. But those and every other program tried with the ThinWrite 100 gave perfect printouts at all densities and qualities.

Printing quality is just what's expected of a nine-pin printhead. Adequate but not spectacular. Speed is another matter. At 100 cps, draft quality is within conventional and popular speed ranges. But many printers provide near-letter-quality at about half the speed of draft quality. This printer is rated at only 25 cps for near-letter-quality. While that mode provides attractive printouts, it is so slow most users probably would avoid it.

Structurally, ThinWrite 100 feels somewhat flimsy even though it is rated at 4,000 hours mean time between failures. Yet heftier construction would add weight and decrease portability.

The tractor drive for fanfold paper has no locks for the pin housings, so they can shift too easily when loading paper or even during normal operation. Gears are all plastic and partially obstruct the printer's thumbwheel for adjusting paper. Since gears are exposed and in the way, I've occasionally pinched some skin while positioning paper.

Rear-mounted cable connectors pose interference problems for fanfold paper. Cables encroach on the paper path since there are no extended guides behind the tractor or printer. That keeps paper from feeding as vertically as it should, stresses pin holes and leads to occasional paper skewing and binding. ThinWrite 100 obviously is intended more for single-sheet hand-fed paper than for fanfold paper.

Most printer control is accomplished with software commands from a computer using an extensive set of "escape" commands. Front-panel controls are limited to power switching, online or offline selection and toggling between draft and near-letter-quality modes. Twenty DIP switches control defaults for interface operation, perforation skipping, font selection and other parameters, but the switch blocks are under the printhead path. Partially blocked by the printhead drive belt, they're a little hard to reach. Luckily, they shouldn't need frequent changing.

Despite compromises for compactness and portability, ThinWrite 100 performs well and satisfies a need for a printer usable "in the field." It wouldn't serve as a primary desktop printer, but it isn't intended for that anyway. I wouldn't enjoy lugging the printer, power adapter, cable, computer and paper supply all the time, but it is nice to know I could if I had to.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: Axonix and ThinWrite (Axonix Corp.); Compaq and Deskpro (Compaq Computer Corp.); Centronics (Centronics Data Computer Corp.); ChiWriter (Horstmann Software Design); Epson FX (Epson America Inc.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); ProDesign II (American Small Business Computers); Volkswriter and Volkswriter Scientific (Lifetree Software Inc.).

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Device 1 Printer Interface

Offers Utilities and Fonts

Progressive Peripherals & Software Inc.
464 Kalamath St.
Denver, CO 80204
303/825-4144

Computers: Commodore 64 or 128.
Operating System: Not Applicable.
Features: Four built-in fonts and eight fonts downloadable from utility disk; accessible from BASIC or from within programs; hardware or software switchable near-letter-quality available with all fonts and graphics; prints calendars and banners; overlays text on pictures; 16K buffer holds text or pictures for printing; prints pictures in two sizes, NLQ, regular or halftone modes; listing mode translates BASIC keywords in program listings; perfect proportion mode for pictures; letterhead mode and page formatting commands; supports Canon PJ-1080A color inkjet printer; full 1525 emulation; built-in reset button; can print files directly from disk.
Options: None.
Model Tested: Standard Device 1 Printer Interface used with Commodore 64 and 128 computers and Epson RX-80 printer.
Price: $119.95

Reviewed by Cheryl Peterson

A common complaint about Commodore computers is their use of a nonstandard version of ASCII. Printers marketed by Commodore have no problem handling PETASCII, as it is called, but few people are pleased with Commodore's printers. A few vendors offer other printers with built-in interfaces that translate PETASCII to ASCII, but sometimes these are more expensive and may not be useful with other computers if users decide to upgrade later.An alternative is purchasing a conventional printer and an interface such as the Device 1.

Device 1 does more than just translate between PETASCII and ASCII. A 16K buffer can store disk directories, fonts, pictures or text to be printed. Under computer control, it is possible to load files into the buffer and then print them, thus freeing the computer for other tasks. Pictures can be printed small or large and in full tones or halftones. Users may download pictures and then download text to print over those pictures. Built-in calendar and banner modes take the place of programs sometimes purchased separately.

Users have three ways to send commands to the interface. Most commands may be sent from a menu-driven utility program furnished on disk. They also can be accessed directly by opening the printer channel with a special secondary address. A third way uses ESCape codes. This flexibility lets both novices and experts use the interface comfortably. Some functions, such as linefeed on/off and NLQ on/off also can be set using switches on the outside of the box.

Because NLQ mode is hardware switchable, using a word processor with NLQ switched on automatically prints text in the more attractive style, and any fonts selected will use NLQ mode. NLQ mode also makes graphics print darker.

Page formatting (margins, page length, page numbers and headers) can be set in the interface.

The interface can be set to emulate, PETASCII, transparent or semitransparent modes. In emulate mode, Device 1 converts all print information to codes the printer understands. PETASCII mode does only character transformation. Transparent mode turns the interface off and just passes information to the printer without alteration. Semitransparent mode passes everything except commands meant for the interface to control NLQ, calendar mode and other Device 1 features.

There are four fonts in memory and eight on the utility disk. Fonts can be high, medium or low resolution and can be loaded and used simply by picking one from the menu-driven utility program. A font editor is included on the utility disk, as is a program that can extract fonts from other programs.

However, one feature of the utility program didn't work for me. I couldn't get the calendar feature to print using the disk program, although it did work from direct mode. If NLQ or a font is active, the calendar prints accordingly.

A simple drawing program is included on disk, as is a program to translate files created by popular graphics packages so they can be downloaded to print with Device 1. Though minimal, the DRAW! program is functional and simplifies high-resolution drawing using a joystick to create geometric figures.

Device 1 also has built-in decimal and hexadecimal dump modes ideal for programmers. For programmers who use the special listing mode, BASIC keywords are translated to English abbreviations instead of printing as confusing graphic symbols.

A reset button lets users clear the interface of any outdated instructions without turning the computer off and on.

The manual is small enough to be held in one hand and contains all information needed to use the interface. A programmer's section has information for "techies" who might want to create custom print drivers or EPROMs.

While it is more expensive than some other interfaces, Device 1 provides more features. I don't think any other interface available will let a user get out of lock mode without powering down the entire computer system. With all its other features, I can even see Commodore printer owners buying Device 1 interfaces if they can get them at discounted prices.

Cheryl Peterson, a free-lance writer from Miami Beach, writes reviews for several computer magazines. Her CompuServe User ID number is 72366.2645.

Trademarks: Commodore 64 and Commodore 128 (Commodore Business Machines Inc.); Epson RX-80 (Epson America Inc.).

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Electronic Edition Hardware Reviews

The following hardware reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-220 at any CompuServe Information Service prompt.

Apple IIGS Computer
Manufacturer: *Apple Computer Inc.*

Tandon PCA Series AT-Compatible Computers
Manufacturer: *Tandon Corp.*

Juice Uninterruptible Power Supply
Manufacturer: *Orbic Controls*
Computer: *Apple IIc.*

DuraPak Removable Hard Disk Subsystem
Manufacturer: *Sysgen Inc.*
Computers: *IBM compatibles.*

EGA Wonder Video Adapter
Manufacturer: *ATI Technologies Inc.*
Computers: *IBM compatibles.*

The Professional Writer's Package

Handles Word Processing Needs

Emerging Technology Consultants
4760 Walnut St.
Boulder, CO 80301-4538
303/447-9495 or 800/782-4896

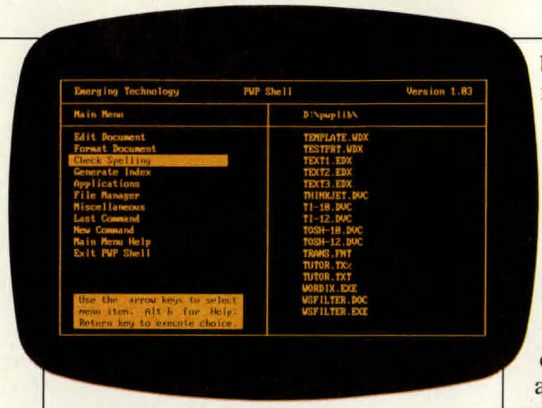
Computers: IBM PC, PC-XT, PC-AT and compatibles; version available for Unix/Xenix computers.
Operating System: PC-DOS or MS-DOS 2.0 or later; Unix/Xenix version also available.
Media: EDIX 5.05 supplied on two diskettes; WORDIX 3.09, INDIX 1.03 and SPELLIX 3.01 each supplied on single diskettes.
Copy Protection: None.
Other Requirements: Minimum 256K RAM; some features require additional RAM.
System Used for Test: 704K Heathkit PC-150 computer with high-resolution color monitor, two double-sided disk drives, two 20MB hard disks and V-20 processor; running MS-DOS 2.13.
List Price: $499 for complete Professional Writer's Package; individual modules cost $195 for EDIX, $195 for WORDIX, $95 for SPELLIX and $95 for INDIX.

Reviewed by Hardin Brothers

The Professional Writer's Package version 1.03 has so much power and flexibility that it is almost intimidating. With a few exceptions, it has more features and capabilities than any word processor I've used, but taking advantage of those features requires patience and a fair amount of experimentation.

There are five components to PWP. The first is a menu shell that can run all other parts. By moving a light bar on the screen, a user can choose to edit a document; check spelling in a document; print a document to the screen, disk or printer; set the PWP system configuration; run DOS commands from within the shell; generate a document index; print form letters, mailing labels, memos, outlines or scripts; and perform other tasks.

The menu shell was handy for getting started with the PWP programs, but most users will probably soon discard it. I found it a little awkward. It also made the entire PWP package just easy enough to work with that, for a couple weeks, it took away my incentive to learn many of the more powerful features of the PWP modules.



Providing commands: *Professional Writer's Package menu shell*

The PWP editor, EDIX, is more a text editor than a word processor and is equally useful for preparing text and writing computer programs. It has all the usual features of most editors, including automatic word wrapping — which can be disabled for programming — adjustable margins and tab settings, block operations, numerous cursor movement commands and insert and overtype modes. Unlike most word processors, EDIX has an extremely powerful search-and-replace function that can search for both absolute matches and partial matches using "regular" expressions. The latter uses various wildcard possibilities (DOS file wildcards are a weak form of the same idea).

EDIX edits only files held in memory but can use all available memory for file buffers. On my system, EDIX reported 552K of memory space for editing. Up to 12 buffers, each containing a different file, could be held in memory at once. EDIX allows up to four screen windows to be visible at a time, each linked to a buffer. The system of windows and buffers with an easily accessible status report is flexible but does not allow different views of the same buffer to be visible at the same time.

Most impressive was the EDIX system of macro commands and key assignments. I didn't much care for the keys EDIX assigned to various editing functions, but it was simple to reassign functions and keys more to my liking. It also is possible to write custom macro commands that add many more functions to EDIX. Several sample macros are included in the PWP package. One set can send the current buffer to the Microsoft Macro Assembler or C Compiler for compilation, return with the cursor on the first error line, and open a second window to display all reported errors. I had little trouble writing macros of my own.

The third module is the SPELLIX spelling checker. It runs as a separate program, so you first save your text and then invoke the spelling checker. Like many spelling checkers, SPELLIX can suggest alternatives for misspelled words, add new words to a user dictionary, allow direct editing of misspelled words and, if you wish, ignore multiple occurrences of the same "unknown" word. One nice feature is a speed control that allows proofreading and correcting while SPELLIX is looking for spelling errors. SPELLIX isn't a speed demon, but it works well.

The fourth module is the INDIX index generator. Creating a full index for a document requires several passes. First, the document must be completed and formatted by WORDIX, with output going to a special disk file. Then INDIX reads that file, making a complete index of all words not in a special "exclude" file. The first index list probably contains words you'll wish to exclude and lacks some concepts that should be indexed even though they are not mentioned specifically in the text. A secondary exclude file, an "include" file that forces certain words to be included and a "concept" file all can be created with the EDIX editor.

INDIX takes the original text plus all the separate files and generates a final index. Then the text formatter can print the index in final form. The process is not automatic, but it is much easier than creating an index by hand.

The final PWP module is a text formatter called WORDIX. It takes text created with EDIX or any other text processor and massages it into disk, screen or printer output. WORDIX expects dot commands in the document to specify such things as margin and tab positioning, indentation changes, line spacing, headers, footers, footnotes and endnotes. Like EDIX, WORDIX has a complex macro language that gives it flexibility. WORDIX can print in columns. It can change textfiles into scripts or outlines. And it can produce letters with set formats, memos, form letters and mailing labels.

WORDIX is supplied with printer personality files for a wide range of printers and has instructions for creating custom files for others. The process

for doing so is simple, but requires some study of a printer manual to find the necessary information.

All PWP documentation is thorough and readable, but none of it is intended for the computer novice. This entire package is intended for sophisticated users, not for beginners or for those who only write occasionally.

I sometimes wish there was some way to configure the editor into a "what you see is what you get" mode that includes page breaks, page margins and the like, but there are advantages of having separate text processing and formatting programs, including having more memory space for editing. The great flexibility of the PWP system means it can do far more than any other word processor I've tried.

Hardin Brothers is a writer, computer programmer and teacher living near Los Angeles. He is a frequent contributor to several computer magazines. His CompuServe User ID number is 72165,735.

Trademarks: Heathkit (Heath Co.); IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Inc.); Professional Writer's Package, EDIX, WORDIX, SPELLIX and INDEX (Emerging Technology Consultants Inc.).

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VP-Info

Wields dBase II Power at a Paperback Price

Paperback Software International
2830 Ninth St.
Berkeley, CA 94710
415/644-2116 or 800/443-0100

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating System: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires two 360K diskette drives or one diskette drive and a hard disk.
Copy Protection: Regular version requires a key disk in drive A; unprotected version available at extra cost.
Required Peripherals: None.
Other Requirements: Minimum 256K RAM.
Optional Items: None.
System used for test: 640K Compaq Plus Portable with one 360K diskette drive, one 10MB hard disk and Epson RX-80 printer.
List Price: $99.95 ($109.95 for version without copy protection).

Reviewed by Harry Green

Paperback software made its mark emulating programs that are practically industry standards. VP-Info is a clone of a database management system that reached its zenith about three years ago, namely dBase II. VP-Info has all the attributes of dBase II, most of its flaws and more than a few enhancements such as an ability to read dBase III files, increased speed and networking capability.

While VP-Info emulates dBase II with a few procedural changes, it also retains dBase's principal drawbacks. Whereas most programs start with some greeting, VP-Info presents a stark, blank screen with only a "1›" prompt that awaits your first command. Therein lies its primary shortcoming: this command-driven program lacks application generators to make it easy to use. Just as dBase II was never accused of congeniality, VP-Info suffers the same deficiency.

If you're familiar with dBase II, the transition shouldn't be difficult. With a few exceptions, commands are identical, but VP-Info offers a much longer list of functions and is a definite improvement over dBase II.

A command language, which VP-Info uses, is fine for professional programmers. Many prefer it to menus that chop productivity and limit the elegance of a finely turned page of code. Many of us, however, do not have time to learn the language. Our applications are anything but elegant, and we prefer menus that help us create files, forms and reports.

The VP-Info file structure is easy to create after you learn a few simple commands. The program presents a reasonably effective form that prompts you to name the fields and set their variables. Field types are set as character, numerical or logical, and herein lies a problem. Missing is the ability to specify common formats such as social security number, telephone number and ZIP code. The user must type separating parentheses and dashes, which wastes keystrokes.

Also missing is the ability to make fields repetitive from previous records. If you have a hundred customers in Schenectady or Albuquerque, your fingers will get very tired unless you have a macro generator. An accomplished programmer can use VP-Info's command files to accomplish almost any such repetitive task, but casual users probably will be intimidated by the complexity.

Creating an input form is simple; the program does it automatically. The standard form design is not elegant, so VP-Info offers a command-driven process to make it more pleasing and efficient. The language is not difficult, but it cannot compare to the ease of other programs with form generating utilities.

Both the database and forms creation processes are tolerable, particularly at VP-Info's bargain price. But generating reports with the command language is an exercise for a professional or someone who is rewarded by the pleasure of accomplishing a difficult task. For those on a time budget, a report generating utility would be worth more money.

VP-Info has another advantage over most low-cost programs. It can be used on a network, although the feature was not tested because I lacked a suitable network. The licensing agreement permits all computers on the network to share VP-Info, but requires you to own one copy per computer. The program contains record locking capabilities to prevent users from overwriting the same record and destroying one another's work.

The VP-Info manual is one of the best in the industry. The program and the manual don't behave exactly the same way for all commands, but most users won't be put off by the minor discrepancies. The tutorial is effectively integrated with the manual, so a few paragraphs describe a function, and a page or two of tutorial then lets you try it out.

A substantial market for VP-Info exists among users who already have an investment in dBase II programs and want to extend the benefits to others at minimum cost. Because you can read existing dBase files and use their report structures, VP-Info is an economical way to minimize the cost of software, and it may be exactly this market its creators had in mind. For first-time DBMS users who are not accomplished programmers, money could be spent more profitably on a program with a better user interface.

Harry Green is president of Pacific Netcom Inc., a Portland, Ore., firm that consults with businesses on using office automation and telecommunications to improve productivity. His CompuServe User ID number is 70007,431.

Trademarks: Compaq and Compaq Plus (Compaq Computer Corp.); dBase II and dBase III (Ashton-Tate Co.); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); MS-DOS (Microsoft Corp.); VP-Info (Paperback Software International).

GO OLI or circle 15 on the Reader Service Form.

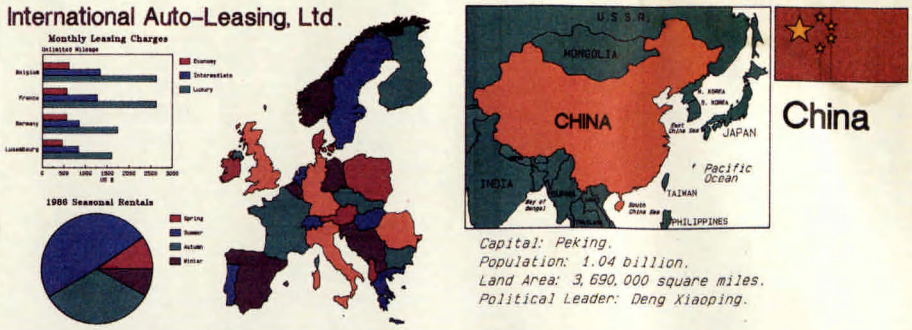
Freelance Plus

Lotus Puts The Plus into Presentation Graphics

Lotus Development Corp.
55 Cambridge Pkwy.
Cambridge, MA 02142
617/577-8500

Computers: IBM PC, PC-XT, PC-AT, 3270 PC and fully compatible computers.
Operating Systems: PC-DOS or MS-DOS version 2.0 or higher.
Media: Requires two diskette drives or a diskette drive and a hard disk or cartridge drive.
Copy Protection: None.
Required Peripherals: Color or graphics monitor with suitable IBM CGA, IBM EGA, Hercules (Monochrome) Graphics or equivalent video adapter.
Other Requirements: Minimum 384K of RAM for PC, PC-XT and PC-AT compatible computers; minimum 640K of RAM for 3270 PC.
Optional Items: Additional diskette drives or hard disk; supports Microsoft and Mouse Systems mice, Kurta and Summagraphics tablet digitizers, various color and monochrome printers, several brands and models of plotters and image or film recorders from Matrix, Polaroid and VideoShow; supports 8087 and 80287 math coprocessors (highly recommended); various collections of Lotus Freelance Maps available for use with Freelance Plus.
System used for test: 640K Compaq Deskpro with two diskette drives, 20MB IOMEGA Alpha-10 Cartridge Drive Subsystem (Bernoulli Box), Video-7 VEGA Deluxe video card, NEC MultiSync monitor, 8087/2 math coprocessor, Maynard Mouse (Microsoft Mouse compatible), Epson FX-85 printer and Hewlett-Packard 7475A Graphics Plotter; running IBM PC-DOS 3.10.
List Prices: $495 for Freelance Plus; additional libraries of Lotus Freelance Maps cost from $145 to $395.

Reviewed by Ernest E. Mau



Charting functions combined with templates: *Lotus Freelance Plus*

Originally from Graphic Communications, Freelance 1.0 was a capable presentation graphics system. It had a predrawn symbol library, effective drawing functions, open structure for importing ASCII or 1-2-3 and Symphony "PIC" files, drawing exchange with a business graphics program called Graphwriter and other attractive features.

Now owned by Lotus Development Corp., Freelance has been enhanced and re-released as Freelance Plus (version 2.0). Lotus has done much to make Freelance Plus a solid, general-purpose graphics package.

A significant enhancement adds rudimentary charting. Before, Freelance could only import and dress up charts already drawn by certain other programs. Now, it has its own vertical bar, horizontal bar, stacked bar, line, pie, X-Y (scatter) and text charting capabilities. It can accept data entered into tables from the keyboard or imported from 1-2-3 or Symphony worksheet files or dBase files.

Freelance Plus still imports fully drawn charts from 1-2-3 and Symphony PIC files and from so-called "Metafiles" meeting a developing standard format. Charts imported or prepared wholly within Freelance Plus can be edited and augmented with symbols, maps, logos, sketches and other touches.

However, Freelance Plus is primarily a presentation system and lacks some frills of a dedicated charting package. The ability to import charts from Graphwriter (now also a Lotus product) remains important for serious users, and combining the two packages gives optimal flexibility.

Other enhancements include improved navigation through menus, added power in freehand drawing and new fill patterns that provide gray scales for black-and-white printers.

New full-screen drivers plot to the video screen. While useful with screen capturing programs, these provide the only way to see text in its real form before committing to hard copy. Freelance Plus normally displays what you'll get, except for text which appears on the editing screen as stick letters regardless of the font selected. Size and color are reflected but not appearance, so creative lettering of text or other charts is difficult. While screen preview plotting is not an ideal solution, it helps.

Freelance Plus provides reasonable drawing primitives for lines, arrows, rectangles, polygons, two-point circles, circular slices and arcs. It even handles ellipses and elliptical arcs, which many other programs cannot. It also had freehand sketching and provides some CAD-like aids including a snap grid, object moving, point moving (object stretching), copying, replicating, flipping, rotating, erasing, unerasing and so on. Zooming, panning, windowing and scaling are available independently for each of two accessible drawing pages.

Yet an important CAD function is missing. Freelance Plus cannot break or trim lines. That can make some editing tasks difficult, as when fitting part of a map inside a border.

Polygon handling is interesting. Only polygons can be filled, but almost any shape can be made into a closed polygon with special joining commands. Assembled polygons often can be split into components for detailed editing. Some caution is necessary because one method of converting cannot be undone. Unfortunately, that method is used for Freelance Maps, which sometimes cannot be split to remove individual sections. Zeroing in on one part of a large multi-country map and removing portions of countries can involve tediously moving and deleting hundreds of points along polygon edges.

I have a problem with polygon filling. As it operates on one polygon, it ignores others inside. If I have a circle in a box, filling the box goes right over or under the circle. Although special commands move polygons to the front or back for proper screen display or printer output, they don't work for plots. Pen plotters draw every polygon

and fill completely, overlapping shapes with no clipping. That limits plotter use, and Freelance Plus would benefit from a utility to analyze and clip vectors much like it now prepares bit maps for printers.

Printouts are fair, especially with new fill patterns, but I prefer pen plots for visual impact. Freelance Plus has good plotter support with selectable pen widths, pen speeds and media types. It even pauses for insertion of new pens after using all pens in one holder. That rare feature permits plotting more colors than can be loaded at once. However, I would like an easy way to specify exact pen sequencing to avoid smudging by not dragging light colors over dark outlines and text. Trying to outwit the program's automatic reassignment of pen stalls is frustrating.

Nevertheless, Freelance Plus is a powerful, mature system that is passably easy to learn and use. It easily satisfies most presentation needs at a price consistent with today's market.

Ernest E. Mau, a full-time free-lance writer and Online Today *reviews editor, is based in Aurora, Colo. He is the author of several books and nearly 300 articles on microcomputer products and applications.*

Trademarks: Alpha-10, IOMEGA and Bernoulli Box (IOMEGA Corp.); Compaq and Deskpro (Compaq Computer Corp.); dBase (Ashton-Tate); Epson and Epson FX (Epson America Inc.); IBM, PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Lotus, 1-2-3, Symphony, Freelance Plus and Graphwriter (Lotus Development Corp.); MS-DOS (Microsoft Inc.); MultiSync (NEC Home Electronics Inc.); VEGA and VEGA Deluxe (Video-7 Inc.).

GO OLI or circle 16 on the Reader Service Form.

Cruise Control:

A Handy Cursor Control Utility

Revolution Software
715 Route 10 East
Randolph, NJ 07869
201/366-4445

Computers: IBM PC, PC-XT, PC-AT and compatibles.
Operating Systems: MS-DOS or PC-DOS version 2.0 or higher.
Media: Requires diskette drive or hard disk.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Memory-resident program occupies 5K of RAM.
Optional Items: None.

System used for test: 640K IBM PC-XT with Hercules Graphic Card Plus, two diskette drives, Maynard 20MB hard disk and Okidata Microline 84 printer; running PC-DOS 2.1.
List Price: $29.95

Reviewed by William J. Lynott

I would hate to be given the job of cataloging available add-on utility programs for personal computers. There must be thousands of them. There are utilities that make it easier to use DOS, to create macros, to remind you to go to the dentist, to reorganize your hard disk and to unprotect protected programs. There are utilities that appear in "windows," and there are utilities that pop up on demand.

To complicate the matter, many utilities are memory-resident. They lie there waiting for you to call them up for action, or they go to work whether you ask them to or not. With so many lying around in unused but precious RAM, it is no wonder that incompatibility between programs is becoming a problem.

So, does the world need another utility? I think not. But whether the world needs it or not, Cruise Control is a nifty idea. I like it.

I was skeptical at first. A utility designed to speed up or slow down cursor speed seemed like a wretched excess. But I've changed my mind. A few minutes with Cruise Control might make you a convert, too.

Cruise Control is memory-resident but takes only 5K of RAM, which is a mere pittance these days. It is not copy-protected, and installation is among the most slickly designed I've seen. The simple menu-driven procedure is automated, so it will create an auto-exec file or modify an existing one to load Cruise Control automatically each time you fire up your computer. Of course, you can keep the process manual if you prefer; just type CRUISE whenever you want to load the program into memory.

Once installation is complete, you can speed up the cursor a step at a time until it virtually flies up, down and across the screen. If you've ever scrolled through a long file with your word processor, you know how agonizingly slow that process can be. With Cruise Control, you'll be amazed at how fast that little devil can travel. I tested this feature with a long WordPerfect file and found that cursor speed could be almost doubled.

Increased speed isn't the only way Cruise Control enhances cursor operation. Chances are that you've seen a cursor continue to zip through a spreadsheet file long after you've lifted your finger off the arrow key. When it finally comes to a halt, likely as not, it rests somewhere far beyond your intended destination. The anti-skid braking feature of Cruise Control lets you bring the cursor to a screeching halt as soon as you release the arrow key. This flexibility can be a genuine time-saver for even the most skilled keyboard artist.

Another handy Cruise Control feature is an automatic screen dimmer. It turns off the screen display when you haven't made a keyboard entry for a specified interval. The default time is 30 minutes, but you can set it anywhere between one and 60 minutes. It is a great way to prevent permanently burning the display onto your screen if you're in the habit of walking away and leaving it on for long periods of time. To bring up the display after Cruise Control has dimmed it, just touch any key.

You also can set any key to repeat until any other key is pressed, and you can insert the current date and time in a format you choose.

I tested Cruise Control with WordPerfect, dBase III Plus and Lotus 1-2-3 release 2. It worked without a hitch. Because different software handles the type-ahead buffer in different ways, you can select one of two formats to gain compatibility with a long list of the most popular applications programs. A list of which format works best with specified programs is included in the documentation.

Cruise Control isn't a product that you can't live without, but it is a nice luxury that comes at an affordable price. The publisher even offers a 60-day money-back guarantee if you're not satisfied. That is something you don't see often in the software business.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Trademarks: Cruise Control (Revolution Software Inc.); dBase III (Ashton-Tate); IBM, IBM PC, PC-XT, PC-AT and PC-DOS (International Business Machines Corp.); Lotus and Lotus 1-2-3 (Lotus Development Corp.); MS-DOS (Microsoft Inc.); Okidata Microline (Okidata Div. of Oki America Inc.); WordPerfect (WordPerfect Corp.).

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Dvorak

Keyboard System for Model 100

Tri-Mike Network East
33 Virginia Dr., #22
Monroe, MI 48161
313/242-9693

Computers: Tandy Models 100, 102 and 200; NEC PC-8201.
Media: Supplied on cassette tape.
Copy Protection: None.
Other Requirements: May be incompatible with some ROM-based; requires 439 bytes of memory (466 bytes including SWAP.BA program).
System used for test: 24K cassette-based Model 100 with no add-on ROMs.
Price: $24.95

Reviewed by Hardin Brothers

There is no doubt that the standard "QWERTY" keyboard on most typewriters and computers is inefficient. For many years, proponents of the Dvorak keyboard have claimed that their arrangement improves typing efficiency by up to 90 percent.

The Dvorak Keyboard System (version 1.1) for the Model 100 and similar computers is a reflection of the Dvorak efficiency. Using fewer than 500 bytes of memory, this program converts the computer's keyboard to a true Dvorak system that meets the ANSI x4.22-1983 standard in all respects but one (the case of the two square brackets is reversed).

Installing this program is easy. Before starting, you must kill any BASIC programs you might want to alter or remove in the future and attach a cassette recorder to your computer. Then a simple command of RUN"CAS:" in BASIC loads the program from tape, runs an installation program and leaves the Dvorak keyboard filter in memory.

Reflecting efficiency: *Dvorak redesigns layout*

A second program on the distribution tape, SWAP.BA, can be loaded into BASIC and saved normally. Whenever Swap is selected from the computer's main menu, it switches the keyboard layout, alternating between QWERTY and Dvorak arrangements.

If you use a Tandy Portable Disk Drive, you also have to load and run a program called PATCH.BA to modify memory-resident disk software. If you use multiple RAM banks, you must install this program in each bank. I don't have a disk drive and was unable to test this final program.

The Dvorak Keyboard System works well with little fuss. The driver uses 439 bytes on my computer; SWAP.BA occupies an additional 27 bytes. The three and one-half pages of documentation are clear and sometimes humorous, and they include a diagram of the Dvorak keyboard layout.

I found no compatibility problems between this program and other software I usually use. The documentation warns that the Dvorak Keyboard System is not compatible with the ROM-based version of Travelling Software's T-View 80. I use the tape-based version of T-View 80 and had no problem running it with the Dvorak keyboard if I installed T-View 80 first.

The documentation suggests using a bent paper clip to remove and rearrange the keys on the computer's keyboard to reflect the Dvorak arrangement. If you're going to use SWAP.BA often to change keyboard styles, however, you probably will want to find another method of marking the keyboard, perhaps using small overlays with both keyboard markings on them. It would be helpful if such labels were included with this software.

Is the Dvorak layout worthwhile? Those who use it claim it is, but those of us who type on several different keyboards each day probably will never learn it well enough to know. I found the key placement bewildering while I was testing this program, as I expected. Yet I could feel that the Dvorak system would not be too difficult to learn. According to the people at Tri-Mike Network East, many handicapped typists find that they can only be productive once they learn the Dvorak system.

With simple installation, low memory requirements and compatibility with most other software, the Dvorak Keyboard System seems an ideal program. Laptop computers need more such software that is so easy to use and so well-behaved.

Hardin Brothers is a writer, computer programmer and teacher living near Los Angeles. He is a frequent contributor to several computer magazines. His CompuServe User ID number is 72165,735.

Trademarks: Model 100, Model 102 and Model 200 (Tandy Corp.); PC-8201 (NEC Information Systems Inc.); T-View 80 (Travelling Software Inc.).

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Electronic Edition Software Reviews

The following reviews are available this month on *Online Today Electronic Edition* by typing GO OLT-230 at any CompuServe Information Service prompt.

Organize! Database With Math
Manufacturer: *Micro-Systems Software Inc.*
Computer: *Commodore Amiga.*

LogoWriter Integrated Learning Tool
Manufacturer: *Logo Computer Systems.*
Computers: *Apple II series; IBM compatibles; Commodore.*

TurboCAD Design Software
Manufacturer: *MSA Group.*
Computers: *IBM compatibles.*

GEM Draw Plus Graphics System
Manufacturer: *Digital Research Inc.*
Computers: *IBM and AT&T compatibles.*

PC/VSAM Data Access Method; Starting Lineup Integrated Utilities; Script/PC II Text Editor
Manufacturer: *IBM Personally Developed Software.*
Computers: *IBM compatibles.*

Bookmark Software Recovery Program
Manufacturer: *Intellisoft International.*
Computers: *IBM compatibles; AT&T; Toshiba.*

Samna Plus IV Word Processor And Spreadsheet
Manufacturer: *Samna Corp.*
Computers: *IBM compatibles.*

Hot Line Telephone Directory and Autodialer
Manufacturer: *General Information*
Computers: *IBM compatibles.*

Reflex Database Manager With Workshop; Turbo Numerical Methods Toolbox
Manufacturer: *Borland International*
Computers: *IBM compatibles.*

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The Super Modem 2400 automatically adjusts itself to match terminal's (or computer's) baud rate, parity and stop bits. The default setting is CCITT 2,400 bps but all parameters can be changed in the modem's non-volatile memory by using the extended "AT" command set. 11 status LED's are provided: Auto answer, off hook, high speed, DSR, RTS, DCD, TD, RD, RI, CTS and DTR. Switches are provided for constant carrier, holding DTR high, crossing pins 2 and 3, 11 bit characters and auto answer.

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EQUALIZATION: Automatic adaptive
DIAGNOSTICS: Self test, local and remote analog and digital loopback
DCE interface (stand alone models) EIA RS232C
VF interface 10 foot cable with RJ-11 jack. FCC approved
DIMENSIONS: 8½" x 6¼" x 1½" – weight 1.5 lbs. (0.69 Kg.)

Hayes is a registered trade mark of Hayes Microcomputer Products Inc.

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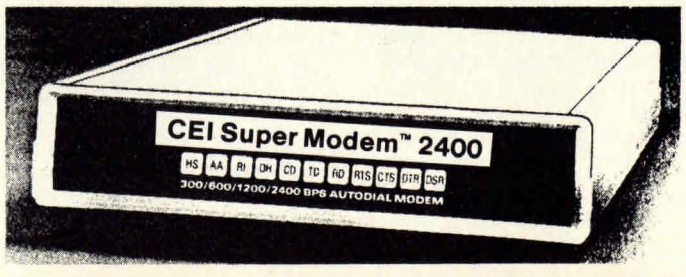

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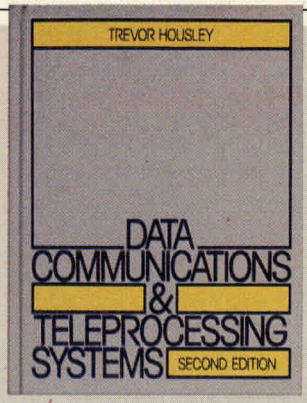

User-friendly textbook: *Housley*

Data Communications & Teleprocessing Systems

Second Edition

By Trevor Housley
Prentice-Hall, 1987
474 pages, $38.95 (hardcover)
Reviewed by Harry Green

For me, one of life's great mysteries has always been why textbooks are unreadable, so it is an unexpected pleasure to find one that is not.

Data Communications & Teleprocessing Systems is a formidable looking book with a battleship-gray cover and no jacket, but the author's style is nothing like the parched prose that characterizes so many texts. Missing are the end-of-chapter problems, the obligatory case studies and the diligent avoidance of all personal pronouns that many authors apparently feel is a badge of their scholarship.

The market, in case it had escaped your attention, is pretty well saturated with books on data communications, but most tend to the extremes of too much or too little detail. I have taught data communications from three different texts, none of which cover the subject matter as well as this one. No previous knowledge of data communications is needed to tackle this book, but some background in data processing would be helpful.

Occasionally, Housley gets some of his facts a bit confused, possibly as a result of carrying over previously accurate information from the first edition. For example, he states that "most telephone exchanges in the world use electromechanical switching equipment..." and goes on to explain this as the source of transmission errors. He then states that it will be "20 to 30 years before we have full electronic switching penetration." This statement may be true for lesser developed nations, but in this country (for which the book was written) electronic switching is almost fully developed except for small exchanges where data transmission is of little importance. Although he makes an occasional misleading statement, for the most part, the book is accurate and much easier to understand than competing volumes.

The book is in five parts. The first part covers hardware and networks, the second protocols and architectures and the third common carrier networks. Part IV deals with planning and management, and Part V with queuing and statistical calculations. Considering that each part is complex enough to warrant one or two volumes in itself, Housley covers the scope of data communications thoroughly enough that it forms an excellent introduction to the subject.

If you are looking for a book that covers data communications authoritatively, yet is easy to read and understand, this one is an excellent choice.

Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007,431.

Microsoft Word Made Easy

Second Edition

By Paul Hoffman
Osborne McGraw-Hill, 1987
374 pages, $16.95 (softcover)
Reviewed by William J. Lynott

The original edition of *Microsoft Word Made Easy* covered releases 1 and 2 of the program. When release 3 of Word hit the market, there were so many improvements and additions that the book in its original form was immediately outdated. The second edition takes care of that.

All of Word's new features are covered and, as was the case in the original book, there is a lot of information not contained in the program's documentation. Appendix E, for example, provides more helpful information on installing Word and setting up your hardware to use it than is contained in the program's documentation.

Microsoft Word Made Easy does a good job of living up to its title. It begins with a gentle introduction to the Word program ands40progresses in steps from the basics to the program's more advanced features. The first six chapters cover simple tasks such as entering and editing text, and printing a document.

Advanced formatting techniques are covered in Chapters 7 through 10. Here you'll learn such things as how to use and set tabs, set up column formats and make use of running heads and page numbering. As in other parts of the book, you'll pick up a lot of tips on using a mouse with Word in these chapters.

By the time you reach Chapters 11 through 13, you'll be working with more advanced techniques. Such things as setting up your printer to take advantage of Word's features, and using the printing queue and the merge feature are covered in considerable detail here.

The remaining chapters cover Word's most advanced features and the new features introduced in release 3. Here you'll learn how to create an outline, make a table of contents or an index and format for multiple columns. Word's math and sorting capabilities also are covered in the final chapters.

The author's easy-to-read style is supplemented with reproductions of screen displays throughout the book. This is a big help in understanding the use of some of the more advanced commands and program features. *Microsoft Word Made Easy* also provides more information on using a mouse with the program than I have seen in other books.

I particularly like the arrangement of topics and chapters in this book. They are organized in such a way that the book should be a quick and easy reference when you need to look up a specific feature or command.

In a style that is becoming a tradition in the world of PC software, *Microsoft Word Made Easy* fills in the gaps in the program's original documentation. It covers the use of Word in a logical progression and informal writing style. While it is certainly no substitute for the detailed information in the documentation, it is an excellent supplement that will help the reader to get the most out of this classic program.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Telecommuting: How to Make it Work for You and Your Company

By Gil E. Gordon and Marcia M. Kelly
Prentice-Hall, 1986
228 pages, $29.95 (hardcover)
Reviewed by Susan Katz

If you're already online, chances are you've given some thought to telecommuting, either for yourself or your employees. Maybe you've thought about sleeping through the 6 a.m. alarm, rolling out of bed at 9, ambling downstairs in robe and slippers and doing a late-morning stretch in front of the computer.

Popular notions like this one lead people to lust for such a lifestyle and companies to run the other direction in panic.

But telecommuting, as anyone who's tried it can tell you, involves more than a leisurely, unshaven start to the day. Just what is involved is thoroughly explained in *Telecommuting: How to Make it Work for You and Your Company*. The authors are well qualified to write on the subject. Gordon is editor of the monthly *Telecommuting Review* and founder of Gil Gordon Associates, a human resource management consulting firm. He is well known in the Work-from-Home Forum, where he frequently lends his expertise to telecommuters.

Kelly is publisher of the monthly *Telecommuting Report* and founder and president of Electronic Services Unlimited, a New York research, consulting and training firm specializing in telecommuting.

The book is well-written, thorough and authoritative. Each chapter tackles an area of concern for managers considering telecommuting, such as, "What's in It for Me and My Company?," "How to Get Started," "How to Select the Suitable Jobs," "How to Select the People," "How to Train the Telecommuters," and "Seven Potential Problem Areas and How to Cope with Them."

The book offers solutions with several checklists in each chapter, summarizing the main points in an easy-to-understand format.

While *Telecommuting* deals with two of the most potentially jargon-laden fields (computers and management), it avoids falling into the jargon jungle. Instead, it is written in plain English, understandable without being condescending. The only lapse I encountered was mention of "throughput."

The book states clearly on the cover what it is and what it is going to do and then does it. The only enhancement I would suggest for future editions would be an appendix listing all of the many references mentioned (such as the Job Accommodation Network and the American Productivity Center).

Telecommuting contains a goldmine of current thought on management and telecommuting. If you're considering implementing a program in your company, either for yourself or your employees, you'd be wise to check out this book.

Susan Katz, a free-lance writer from Raleigh, N.C., writes a monthly computer column, "Home Tech," for The Spectator *magazine. Her CompuServe User ID number is 72277,107.*

Commodore 128 BASIC Training Guide

By Frank Kampow
Abacus Software, 1986
295 pages, $16.95 (softcover)
Reviewed by James Moran

The cover of *Commodore 128 BASIC Training Guide* features a toddler playing with blocks. Although the allusion to child's play may not be purposeful, this book is meant for those who want to learn BASIC programming on the C-128.

Subtitled "Everyone's guide to learning BASIC on the C-128," this book contains a thorough presentation of Commodore BASIC. It begins with an explanation of programming terminology, including information on flowcharts, number systems, logical operators and ASCII coding. It even contains examples of truth tables. By now, you should be getting the idea that this book isn't a casual romp through BASICland.

In addition to BASIC, readers will learn some necessary logic skills, such as how to do a flowchart. Too often, charting is an overlooked skill. It can easily prove its value when it changes programming from a confusing tangle of specifications to a planned attack on a solvable problem.

Other topics include creating and using menus, graphics, sound and windows. Some information on structured programming is included. For those who never understood the correct use of disk files, a chapter on the principles of file management is useful, if somewhat cursory.

The information in *Commodore 128 BASIC Training Guide* is presented as textbook material. Although its tone is stilted, the writing is clear and understandable. Each chapter ends with an exercise, and answers are listed in the last chapter.

Commodore 128 BASIC Training Guide does an acceptable job of teaching its subject, but it begins on the run and then picks up speed. Many readers will find that this text moves too fast for them. Still, this is an excellent text for C-128 users who want to get serious about BASIC.

James Moran is the editor of Compu-Syn, *a syndicated news service that specializes in computers and robotics. His CompuServe User ID number is 70007,2253.*

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American Oil 'Lottery' Opens To All in August!

ADVANCE NOTICE (SPECIAL)—

The U.S. Department of the Interior has officially announced that public lands will be awarded to hundreds of citizens in upcoming public drawings conducted by the Bureau of Land Management.

Incredibly, many will risk no more than a tax deductible $50 to participate in this little-known program that affords each American the right to compete equally with major oil companies for valuable leases on U.S. public lands.

Some may realize unforeseen riches by selling their rights to oil companies while retaining lifelong royalties on any future oil or gas production.

Information and entry details are available from the Arthur Allan Co., P.O. Box 66009, Anaheim, Calif. 92806. Please enclose $1.00 to cover postage and handling.

For information on-line, use your modem to call (805) 656-0379 (DATA 8/1/N).

The Arthur Allan Co. will rush entry information and full instructions to meet the August closing deadline.

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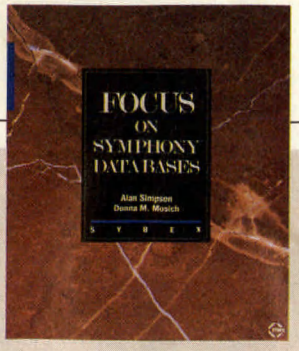
BOOK REVIEW

Focus on Symphony Databases

By Alan Simpson and Donna Mosich
Sybex, 1986
390 pages, $19.95 (softcover)
Reviewed by Brian D. Monahan



Focus on Symphony: *Simpson, Mosich*

Symphony is an integrated software package capable of doing spreadsheets, databases, graphics, word processing and telecommunications. The manual that comes with Symphony is actually several manuals, totaling more than 1,000 pages. *Focus on Symphony Databases* is of a more manageable size because it covers only one capability of Symphony.

Written for users who have some experience with the software or its predecessor, Lotus 1-2-3, the book examines Symphony database management capabilities in detail. Other features of Symphony are treated only as they enhance the program's database capabilities.

Focus on Symphony Databases is written in a tutorial format. The first section uses mailing-list and sales-tracking databases to teach basic concepts of design and use. The concepts covered include creating, modifying, sorting and searching a database. The steps involved in each operation are clearly described in a keystroke-by-keystroke fashion.

Sections are short to make them easy to master, and a variety of print styles enhances readability. Since the book relies on databases built by the user, quite a bit of typing is involved. For those who prefer to purchase the databases used in the book rather than type them in, a disk is available from the publisher for $40.

The second section of the book introduces macros and the Symphony Command Language, explaining how these can be used with Symphony databases. This section leads the reader through the development of custom menus that bypass the Symphony menus and allow readers to create sophisticated database systems that can be used by those with less experience.

Finally, *Focus on Symphony Databases* presents two advanced systems with multiple databases and powerful macros. One is an inventory system and the other is an accounts-receivable system. These chapters include virtually all topics covered in the previous chapters. Mastering them requires considerable time and attention to detail. The book includes an appendix demonstrating how Symphony can be used with other software systems, including dBase, Jazz and VisiCalc.

The tutorial format, which works well, may limit the book's usefulness for some readers. Since the text moves sequentially through the development of a few related models, it is sometimes difficult to look up a particular concept. Explanations often assume that the reader has read previous chapters.

For those who need an answer to occasional questions or for those who need to cover all of Symphony's capabilities, there are better choices.

I have used many of Alan Simpson's books in the past and have found them to be uniformly readable and accurate. With Donna Mosich as an able co-author, this book is no exception.

Brian D. Monahan is an associate professor of computer science at Iona College in New Rochelle, N.Y. He has published dozens of articles on computing in scholarly and popular journals.

Electronic Edition Book Reviews

The following book reviews are available this month in *Online Today Electronic Edition* by typing GO OLT-240 at any CompuServe Information Service prompt.

Mastering dBASE III in Less than a Day, *by Tony Lima, Prentice-Hall.*

Information Technology: The Trillion-Dollar Opportunity, *by Harvey L. Poppel and Bernard Goldstein, McGraw-Hill Book Co.*

Mac Insights: Secrets, Shortcuts and Solutions for the Apple Macintosh, *by Lon Poole, Microsoft Press.*

MS-DOS Power User's Guide, *by Jonathan Kamin, Sybex.*

The Official GEOS Programmer's Reference Guide, *by Berkeley Softworks and Michael Farr, Bantam Computer Books.*

Sterling Communications

VM Personal Computing has introduced Relay Silver, a new IBM PC communications software package.

Selling for $150, Relay Silver includes a script language with learn mode, memory-resident operation and an Application Program Interface.

Menu-driven operation and context-sensitive help make the package easy to use for beginners; more experienced users can bypass menus or make the software totally command driven.

For more inforamtion, contact VM Personal Computing, 41 Kenosia Ave., Danbury, CT 06810; 800/222-VMPC (nationwide) and 203/798-3800 (in Connecticut).

Telecommunications Designer Package

Global Technologies in association with Data Base Communications Inc. has introduced a significant language extension for the Clipper Compiler.

AdComm, the Advanced Communications Library, extends Clipper's powerful dBase-compatible database capabilities by enabling programmers to include telecommunications support in their compiled applications. With AdComm, dBase programmers can literally design and build their own telecommunications applications complete with protocol file transfers, baud rates up to 9600 baud, unattended operations and macro processing capabilities. AdComm requires Clipper Winter '85 version or later, an IBM PC, PC-XT, PC-AT or compatible and a Hayes compatible auto-dial modem. Retail price is $295.

For information, contact Global Technologies, 16572 E. Louisiana Dr., Aurora, CO 80017; 303/337-7758.

Carbon Copy Plus

Meridian Technology Inc. has introduced Carbon Copy Plus, the first data communications software for the IBM PC and compatibles which combines PC-to-PC remote control, PC-to-host terminal emulation and XMODEM and Kermit file transfer protocols in one integrated software package.

Features include the ability to emulate a full complement of terminals for access to online databases, compatibility with Crosstalk script files and support of the popular XMODEM and Kermit protocols for file transfer applications.

For information, contact Meridian Technology, 1101 Dove St., Suite 120, Suite 120, Newport Beach, CA 92660; 714/476-2224.

Compression Modem

A new error-correcting compression modem has been introduced by Adaptive Computer Technologies.

The ACT 154 is a full-duplex, asynchronous modem that follows the standard Hayes Command Set. Users can communicate at speeds of up to 9600 baud over standard 2400-baud dial-up data lines or up to 4800 baud over 1200-baud lines using innovative data compression techniques. The data compression performs equally well on all types of data, including text, spreadsheet, database files, binary object code, computer languages, online transactions and more. Retail price is $895.

For information, contact Adaptive Computer Technologies, 2475 Augustine Dr., Santa Clara, CA 95054; 408/727-9722.

MediaVault

The MVP-101 MediaVault is a desktop storage system offering protection to computer disks and tapes against temperatures up to 1,700 degrees Fahrenheit.

Weighing less than 70 pounds, MediaVault handles up to 115 5¼-inch floppy disks or 135 3½-inch disks. Fifteen inches square, it can be housed next to a computer terminal. Equipped with a Medeco lock, it offers protection against both tampering and fire.

For information, contact MediaVault Inc., One Madison St., East Rutherford, NJ 07073; 800/222-3171 (nationwide) and 201/471-1114 (in New Jersey).

PC-Talk4

PC-Talk, the first data communications software created for the IBM PC, is available in its fourth version, featuring practical product enhancements.

PC-Talk4 from Headlands Communications Corp. sells for $129 (PC-Talk users may upgrade for $45). Features include XMODEM.CRC, the latest error-checking protocol for accurate file transfers, screen emulation of VT100/52 as well as the standard TTY terminals for easier access to mainframe computers and large databases, expanded macro capability and an expanded dialing directory.

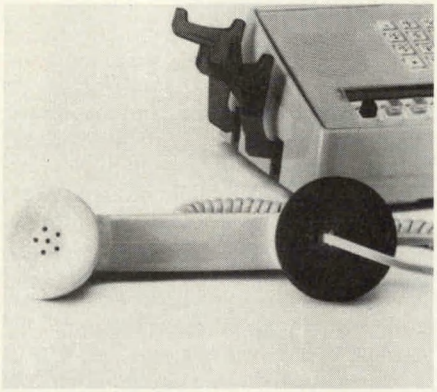
For information, contact Headlands Communications Corp., P.O. Box 8, Tiburon, CA 94920-0008; 415/435-0770.

HyperACCESS Data Compression

Hilgraeve Inc. has introduced version 3.2 of HyperACCESS communications software for the IBM PC and compatibles.

The new release features an automatic file compression technique that speeds up XMODEM and Kermit file transfers by up to four to one relative to conventional implementations of these protocols. The new proprietary file transfer protocol is called HyperProtocol and is designed specifically for use with high speed modems with built-in error correction capabilities.

For information, contact Hilgraeve Inc., P.O. Box 941, Monroe, MI 48161; 313/243-0576.



Black Jack

Black Jack from Microperipheral Corp. is a new portable modular telephone jack attachment for computer telecommunications in hotels, offices and other locations where there are no modular RJ11C jacks.

Constructed of rubber with a built-in circuit card and modular jack, Black Jack's unique connectors make it compatible with single or multi-line telephone headsets. The unit requires no power. Modems equipped with Touch-Tone dialing may dial directly through Black Jack while pulse dialing is accomplished from the dial or keys on the telephone set itself. Retail price is $49.95.

For information, contact The Microperipheral Corp., 2565 152nd Ave. NE, Redmond, WA 98052; 206/881-7544.

PC-to-PC Remote Communications

Network Software Associates Inc. has introduced the first PC-to-PC synchronous communications software package offering both remote-control and concurrent background file transfer capabilities.

Called RemoteTalk, the program operates on an IBM PC or compatible and communicates via IBM's high-speed Synchronous Data Link Control protocol. It is designed primarily for remote support, training and file transfer applications. Two PCs can be linked together as one with the local PC transformed into an extension keyboard and screen of the remote PC.

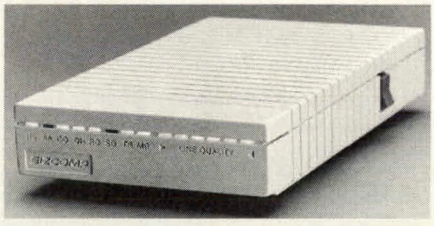
For information, contact Network Software Associates Inc., 22982 Mill Creek, Laguna Hills, CA 92653; 714/768-4013.

Macintosh inTalk

Palantir Software has released version 2.11 of inTalk (formerly inTouch) communications software for the Apple Macintosh.

InTalk is a high-end, power-user oriented software package that handles standard modem communications with ease and provides the features to do much more. InTalk's script language allows the user to "Hide-the-Host" with a Mac-like front end, utilizing user-created dialogue boxes and on-screen function keys. New to this version is Yterm Binary File Transfer protocol for sending and receiving files in Macintosh format to and from IBM mainframes and DEC VAXs. Retail price is $145.

For information, contact Palantir Software, 12777 Jones Rd., Suite 100, Houston, TX 77070; 713/955-8880.



IntelliModem

Bizcomp Corp. has introduced two new 2400-baud modems that incorporate Adaptive Echo Cancellation and other advanced features.

Called the IntelliModem 2400 (external) and the IntelliModem 2400 PC (internal), the modems sell for $599. AEC augments traditional adaptive equalization modem front-end circuitry for superior receive sensitivity, meaning fewer errors on low-level signals.

For information, contact Bizcomp Corp., 532 Mercury Dr., Sunnyvale, CA 94086; 408/733-7800.

Desktop Publishing

PAGEr from Plummer Research is desktop publishing software for the IBM PC and a dot-matrix printer.

PAGEr is the only page layout processor that turns a basic PC with 256K RAM, a monochrome monitor and a dot-matrix printer into a desktop publishing workstation. The software concentrates on creating and arranging text and certain graphics that will appear on an 8½- by 11-inch sheet of paper. The user has control over individual items and their spatial relationships. Retail price is $49.95.

For information, contact Plummer Research, 1345 Greenwood Ave., Palo Alto, CA 94301; 415/324-8160.

MacroModem

MacroModem 1.2 from Kent Engineering and Design is a telecommunications program for the Amiga computer that allows the user to run any remote system almost entirely with the mouse.

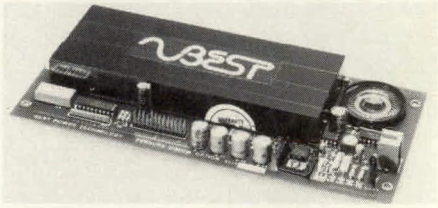
Features include user-written command sequences and command descriptions. Any of the MacroModem commands, remote system commands, control codes, AmigaDOS commands and text can be combined in one macro. Retail price is $69.95.

For information, contact Kent Engineering and Design, 4215 Jordan Rd., P.O. Box 178, Mottville, NY 13119; 315/685-8237.

Remote Monitoring

A built-in modem that allows control and monitoring of FERRUPS uninterruptible power supplies from remote locations via ordinary telephone lines is available from Best Power Technology Inc.

The 300-1200 baud modem features auto-answering and auto-dialing with a provision for programmable access codes to give maximum security. The software that is part of the modem board option will automatically phone the remote location if any one of up to 14 alarm conditions, such as power out



and high ambient temperature, exists. Two-way communication provides operating controls of 16 metering functions.

For information, contact Best Power Technology Inc., P.O. Box 280, Necedah, WI 54646; 800/356-5794 (nationwide) or 608/565-7200 (in Wisconsin).

Laptop Hard Disk

Premier Technologies Inc. has introduced LiteDrive, a portable internal hard disk system for the Toshiba 1100+ laptop computer.

LiteDrive combines the increased speed and memory of a hard disk with the convenience of a full function laptop computer. The system adds 15 times the original disk capacity at up to 20 times the access speed. Installed in place of the second floppy, the 10MB system is completely internal and runs off both battery and AC power. The entire unit adds less than eight ounces to the weight of the 1100+.

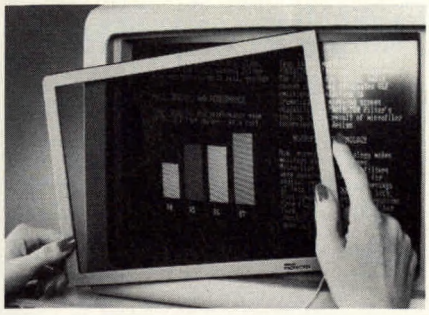
For information, contact Premier Technologies Inc., 1890 McGaw Ave., Irvine, CA 92714; 714/261-1184.

HP LaserJet

Hewlett-Packard Co. has introduced the HP LaserJet Series II printer, an eight-page-per-minute printer that sells for $2,495.

The printer comes resident with 512K of memory to address office-automation applications such as desktop publishing, advanced word processing, graphics and spreadsheet printing. A variety of memory boards is available. Features include a new paper path for correct order output, two font-cartridge slots and support for a greater variety of paper stock.

For information, contact Hewlett-Packard, 3000 Hanover St., Palo Alto, CA 94304; 415/857-1501.



Sun-Flex Glare Screen

The Snap-On Sun-Flex SuperScreen from Sun-Flex Co. is an anti-glare filter for CRT screens that improves contrast by blocking diffuse reflections from bright walls.

The matte black microfiber filter provides a shadow-box effect that can prevent the contrast-killing "white-out" of glare. It also fights glare by using the same technique as the slats on a Venetian blind. Retail price for monochrome monitors is $29.95 and $34.95 for color models. A special protector for high-resolution monitors sells for $49.95.

For information, contact Sun-Flex Co. Inc., 20 Pimentel Ct., Novato, CA 94947-5667; 800/321-1659 (nationwide) or 415/883-1221 (in California).

VersaBraille II+

Telesensory Systems Inc. has introduced the VersaBraille II+, giving braille users a completely portable braille computer.

The unit's built-in 3½-inch disk drive allows professionals and students to carry their files with them. A box of 10 diskettes can store data equivalent to a stack of paper braille pages over 100 feet high. Each VersaBraille II+ diskette can hold up to 128 files. Features include a built-in word processing program and a formatter as well as several useful application programs. Retail price is $4,995.

For information, contact Telesensory Systems Inc., P.O. Box 7455, Mountain View, CA 94039-7455; 415/960-0920.

Electronic Edition Product Announcements

The following new product announcements are available this month in *Online Today Electronic Edition* by typing GO OLT-250 at any CompuServe Information Service prompt.

Turbofonts, *software that incorporates scientific and foreign terms within word processing documents, Image Processing Software Inc.*

DiskTop (Version 2.0), *desk accessory for the Macintosh, CE Software.*

Kamas (Version 2.0), *outline processor for PC/MS-DOS computers, Kamasoft*

PDQ Pascal, *version of Pascal designed for the beginning programmer, Pecan Software Systems.*

DeskMate 3, *integrated software package for the Color Computer 3, Tandy Corp./Radio Shack.*

VersaPoint Level 2, *software for the VersaPoint braille embosser, Telesensory Systems Inc.*

GEM Draw Plus, *enhanced version of object-based drawing program for the IBM, Digital Research.*

Jet-Setter, *laser printer, C. Itoh Digital Products Inc.*

OctoRam ESP, *offers Apple IIGS high speed access of applications or data files, MDIdeas Inc.*

All Chargecard, *advanced memory manager for the IBM PC AT, ALL Computers Inc.*

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Guidelines to Requesting Information Through OLI

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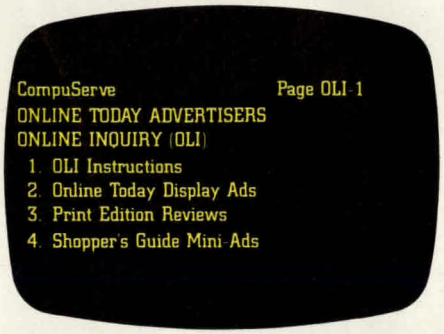
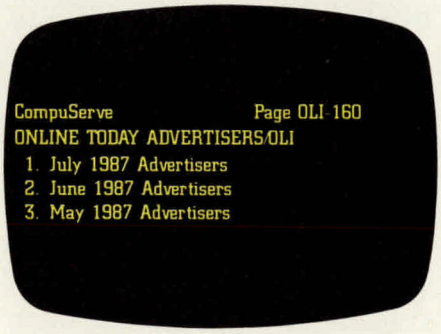
Online Inquiry is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.



Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.



Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

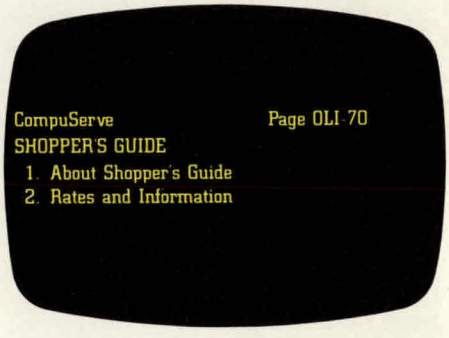
To request information about products reviewed in the print edition, go to page OLI-280 and select the appropriate listing, such as July Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.



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INFORMATION

The advertisers and manufacturers of the products appearing in Online Today *will be pleased to send additional information about their products or services—at no cost to you. Make your selection by circling the advertiser or product by number on the form below. Fill in the requested information and mail to:* Online Today, *Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.* Online Today *will see that your requests are forwarded promptly. You may get a faster response by using the Online Inquiry service system. Simply enter GO OLI at any prompt on the CompuServe system and follow the OLI prompts. Your request will be forwarded.*

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READER INQUIRY

For free information on products or services in this issue of *Online Today*, fill in your name, address, ZIP code and phone number. Then circle the number that corresponds to the number of the advertisement or article in which you are interested.

CompuServe subscribers can request information electronically by entering GO OLI at any prompt.

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Mail to: Online Today, Reader Service Management Dept., P.O. Box 376, Dalton, MA 01227-0376.

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20	40	60	80	100

July issue, not valid after October 1987.

Search Database Designed for Students

As the new school year approaches and you begin looking for new supplies and services, don't overlook your online connections. One of the brightest new features on CompuServe was designed especially for students and teachers.

It's called Einstein, a surcharged gateway to some 85 educational databases across the country. It works very much like the larger IQuest gateway, which is produced by the same information provider, Telebase Systems Inc., this time in cooperation with Addison-Wesley Publishing Co.

The great thing about gateways is that the software is written to help you with your searching. If you've ever used any of the sophisticated online databases, you've found that each has its own set of commands. In fact, the commands differ so greatly from database to database that you can end up spending more time fretting over the command syntax than thinking about the subject for which you are searching.

Einstein solves this problem by translating the commands for us. After accessing the service (GO EINSTEIN), we simply select options from menus to focus on a topic and supply the keywords that describe the topic we're interested in. Einstein does the rest. It links to the appropriate database and, using the information we've supplied, puts our request into the local language that the particular database will understand.

Einstein is available from 5 p.m. to 8 a.m. local time Monday through Friday and all day on weekends and holidays. Through the school year it will be available 24 hours a day from June 1 until Sept. 1, 1987. Each Einstein search costs $4 in addition to the regular CompuServe connect charges.

You begin a search by indicating the broad area of interest, using a menu that lists subjects such as art, music, drama, films, business, literature, science, health, technology, social studies, general reference, education and library science.

Subsequent menus home in on the topic you want to look for, determining the specific subject area and database type you're looking for. Einstein uses this information to select the best of its 85 databases for the job and makes the connection with the vendor of that service, making an automatic call to Dialog, BRS, Wilsonline, Vu/Text, Datasolve or DataTimes. Once the connection is made, Einstein translates your request into that database's command syntax and then displays in menu form up to eight titles of recent articles it has found for you.

There are two basic kinds of databases accessible through Einstein:

Full-text databases, which give you the complete text of articles found. Einstein has a number of full-text databases, including those that contain news wire services and regional newspapers.

Bibliographic databases, which provide basic reference material, such as the citations from publications, including title, author, publication and date. Sometimes there's also an *abstract*, that is, a brief summary of the article.

If the database you're searching is full-text, you may then select any one of the articles listed to view at no extra charge. Additional articles may be retrieved for $4 each. If the database is bibliographic and there are abstracts available, you may see one for an additional $2. If you do not receive any results from your search, the first "no-hit" is free. Subsequent "no-hits" cost $1 each.

Like IQuest, Einstein keeps a running total of your search charges, displaying them after each transaction.

In addition to searchable newspaper and wire service databases (such as the full text of *The Washington Post* and *The Chicago Tribune*, The Associated Press and United Press International and even TASS, the Soviet news service), Einstein links to a number of research mainstays. For instance, it provides connections to *Book Review Digest*, *Books in Print*, *Congressional Record Abstracts*, *Facts On File*, and the *Readers' Guide to Periodical Literature*.

If you want to see if a specific reference resource is available through Einstein, you can look at an alphabetized list of its databases with an option on the main Einstein menu.

The first few times you use Einstein, you'll probably want to let the gateway help choose the best database for the job by answering the menu prompts as described earlier in this column. However, once you're familiar with the service's operation, you may want to bypass this function and instruct Einstein to take you directly to a specific database.

You can do this by typing GO EINSTEIN and, at the main menu, select the "Access Einstein" option. Then select "Other Choices" from the first menu displayed after you've been logged into the gateway. The next menu you see will include the option to "Choose a Specific Database." You'll then be prompted for the name of the database you want; type it in as it appears on the alphabetized list available from the main Einstein menu.

Whether you choose the database yourself or let Einstein do the work, the key to successfully using the service is in what you do when the system finally prompts you to "Enter your specific topic." Here are some tips for entering search words:

- Start the process offline by thinking of the specific word or words that define what you're looking for — MICROCOMPUTER is a better choice than simply COMPUTER; CHOCOLATE rather than CANDY.
- You can use AND to narrow your search, as in BASEBALL AND CINCINNATI; OR to broaden it, such as OIL OR GAS; and NOT to exclude topics such as HORSES NOT RACING.
- Related terms should be enclosed in parentheses — (APPLE OR COMMODORE) AND SCHOOLS.
- The slash (/) is used as a "wildcard," so COMPUT/ would find references to "computers," "computing," "computerists," "computations" and so forth.

Finally, note that some databases have other specific procedures for searching. Before you enter search words, you can type H for a list of important examples. This is an especially good idea if you're using a specific database for the first time.

For more on this new gateway, type GO EINSTEIN at any system prompt and select the "Introduction to Einstein" and the "Search Tips" options.

Charles Bowen, a contributing editor of Online Today, *co-authored* How to Get the Most Out of CompuServe *and* CompuServe for IBM Power Users. *His CompuServe User ID number is 70007,411.*

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